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Table A-1 USGS Water Quality Calibration Stations

| Station  | Agency | Site Name  | USGS Drainage<br>Area (mi²) | USGS<br>Drainage Area<br>(acres) | WASP<br>Segment | Туре        | Parameter  |
|----------|--------|--|-----------------------------|----------------------------------|-----------------|-------------|--|
| 03297830 | USGS   | Floyds Fork at Highway 53                              | 20                          | 12736                            | 40              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297845 | USGS   | Floyds Fork near Crestwood                             | 47                          | 29888                            | 31              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297850 | USGS   | South Fork Curry's Fork at Moody<br>Lane               | 1                           | 742                              | 206             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297855 | USGS   | South Fork Curry's Fork at Highway<br>393              | 9                           | 5939                             | 73              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297860 | USGS   | North Fork Curry's Fork at Stone<br>Ridge road         | 10                          | 6464                             | 68              | Calibration | TEMP, DO,CBOD,TN, NH3, NO $_{\rm X}$ , ORGN, TP, PO4, ORGP, TSS, pH, Chlorophyll-a                             |
| 03297875 | USGS   | Ashers Run at Abbott lane near<br>Crestwood            | 3                           | 2150                             | 77              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297880 | USGS   | Currys Fork near Crestwood                             | 29                          | 18240                            | 65              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297900 | USGS   | Floyds Fork near Peewee Valley                         | 80                          | 51136                            | 208             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297930 | USGS   | Floyds Fork at Echo trail bridge                       | 104                         | 66560                            | 21              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297950 | USGS   | Long Run at Old stage coach road                       | 6                           | 3571                             | 96              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297975 | USGS   | South Long Run at Hobbs Lane                           | 8                           | 4890                             | 109             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03297980 | USGS   | Long Run near Fisherville                              | 23                          | 14400                            | 93              | Calibration | TEMP, DO,CBOD,TN, NH3, NOx, ORGN, TP, PO4, ORGP, TSS, pH, Chlorophyll-a  |
| 03298000 | USGS   | Floyds Fork at Fisherville                             | 138                         | 88320                            | 209             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298005 | USGS   | Pope lick at South poope lick road<br>near Fisherville | 10                          | 6202                             | 118             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298020 | USGS   | Chenoweth Run at Gelhaus Lane                          | 14                          | 9088                             | 124             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298100 | USGS   | Pope lick at pope lick road near<br>Middletown         | 3                           | 1856                             | 120             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298110 | USGS   | Pope lick at Rehl road near Fisherville                | 1                           | 858                              | 121             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298120 | USGS   | Floyds Fork at Seatonville Road                        | 172                         | 110080                           | 13              | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298135 | USGS   | Chenoweth Run at Ruckriegal<br>Parkway                 | 5                           | 3501                             | 140             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298138 | USGS   | Chenoweth Run at Jeffersontown STP at Jeffersontown    | 6                           | 4096                             | 138             | Calibration | TEMP, DO,CBOD,TN, NH3, NO $_{\rm X}$ , ORGN, TP, PO4, ORGP, TSS, pH, Chlorophyll-a                             |
| 03298150 | USGS   | Chenoweth Run at Gelhaus Lane near<br>Fern creek       | 12                          | 7424                             | 211             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298160 | USGS   | Chenoweth Run at Seatonville road near Jeffersontown   | 17                          | 10707                            | 135             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298200 | USGS   | Floyds Fork near Mt. Washington                        | 213                         | 136320                           | 210             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298250 | USGS   | Cedar Creek at Thixton Road                            | 11                          | 7104                             | 173             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298300 | USGS   | Pennsylvania Run at Mt. Washington                     | 6                           | 4096                             | 181             | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| 03298470 | USGS   | Floyds Fork near Shepherdsville                        | 283                         | 181120                           | 1               | Calibration | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |

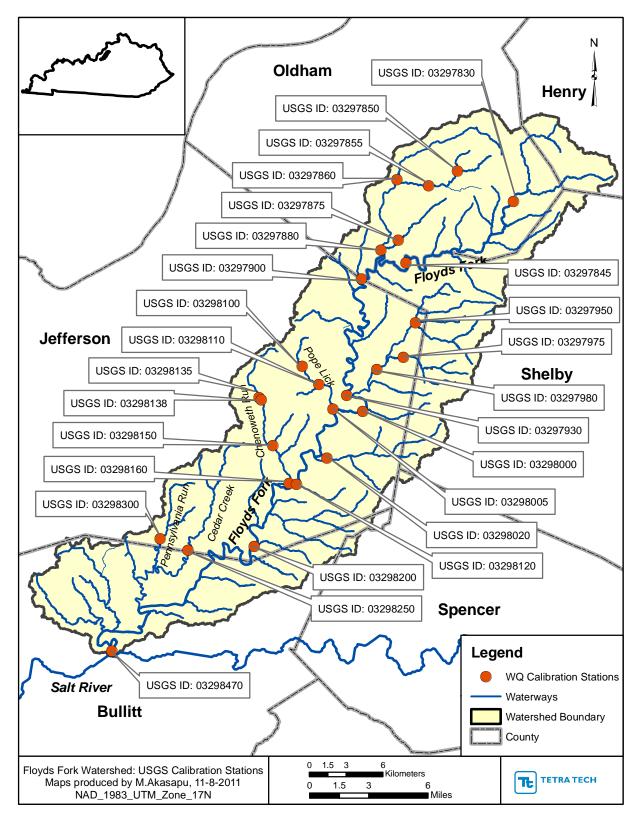


Figure A-1 USGS Water Quality Calibration Stations Utilized in the Floyds Fork Watershed Model

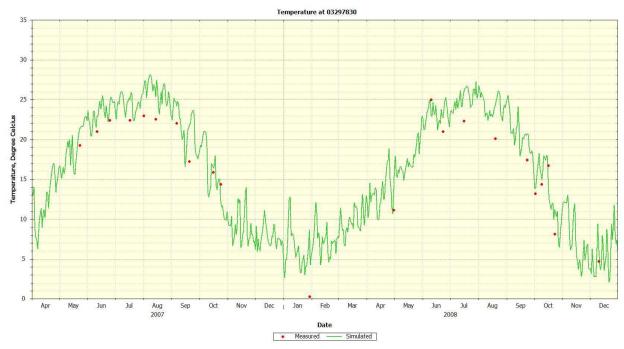


Figure A-2 Modeled vs. Observed TEMP (°C) at 03297830

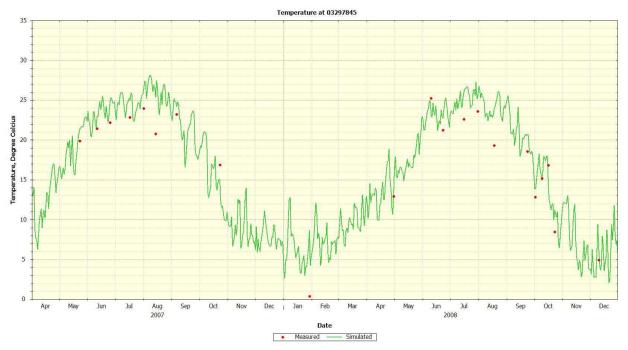


Figure A-3 Modeled vs. Observed TEMP (°C) at 03297845

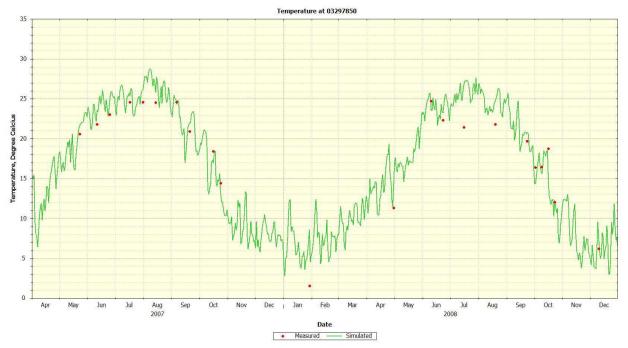


Figure A-4 Modeled vs. Observed TEMP (°C) at 03297850

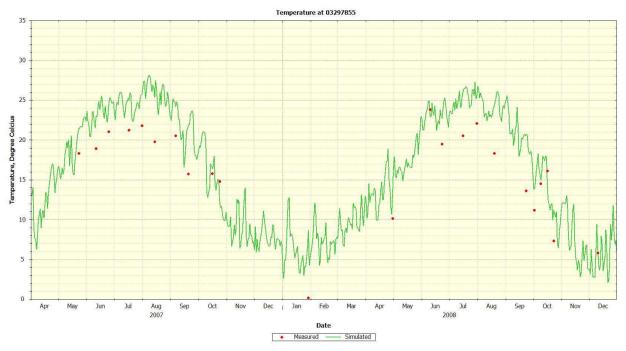


Figure A-5 Modeled vs. Observed TEMP (°C) at 03297855

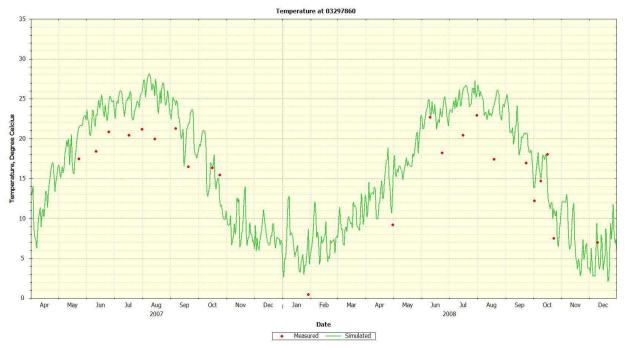


Figure A-6 Modeled vs. Observed TEMP (°C) at 03297860

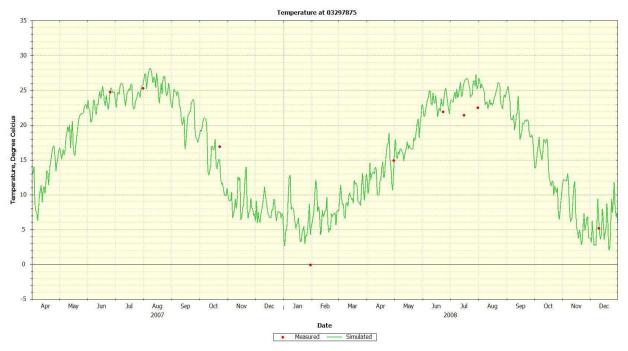


Figure A-7 Modeled vs. Observed TEMP (°C) at 03297875

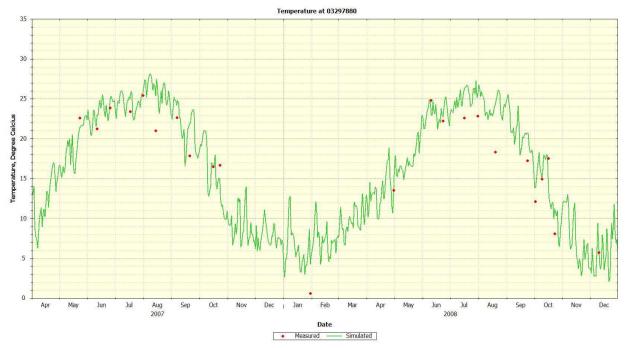


Figure A-8 Modeled vs. Observed TEMP (°C) at 03297880

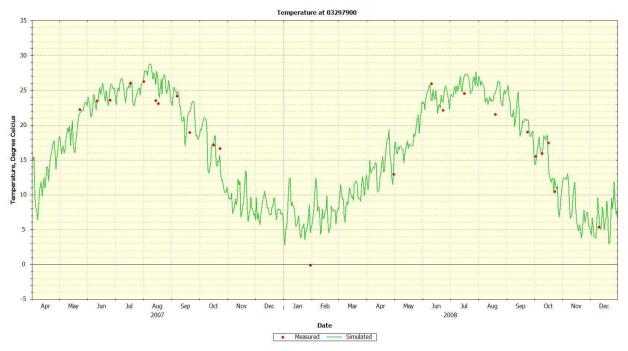


Figure A-9 Modeled vs. Observed TEMP (°C) at 03297900

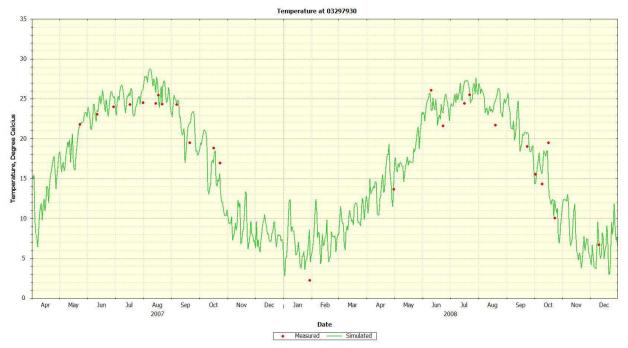


Figure A-10 Modeled vs. Observed TEMP (°C) at 03297930

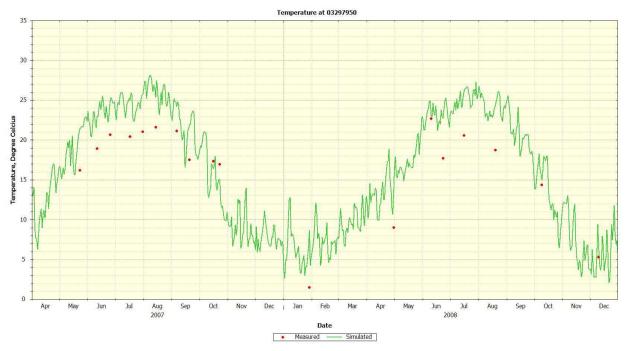


Figure A-11 Modeled vs. Observed TEMP (°C) at 03297950

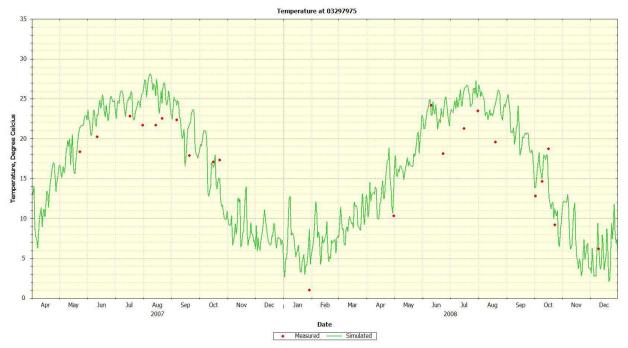


Figure A-12 Modeled vs. Observed TEMP (°C) at 03297975

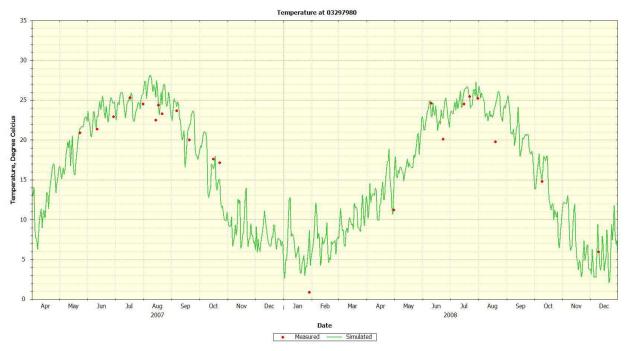


Figure A-13 Modeled vs. Observed TEMP (°C) at 03297980

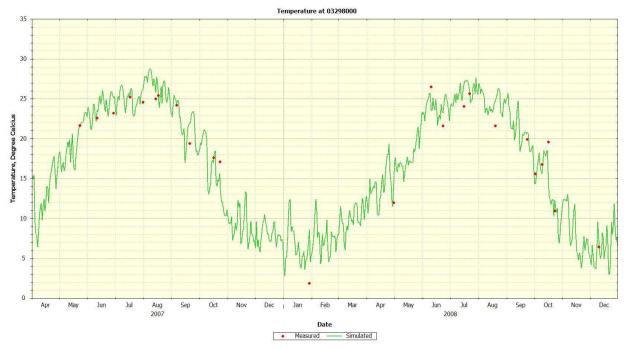


Figure A-14 Modeled vs. Observed TEMP (°C) at 03298000

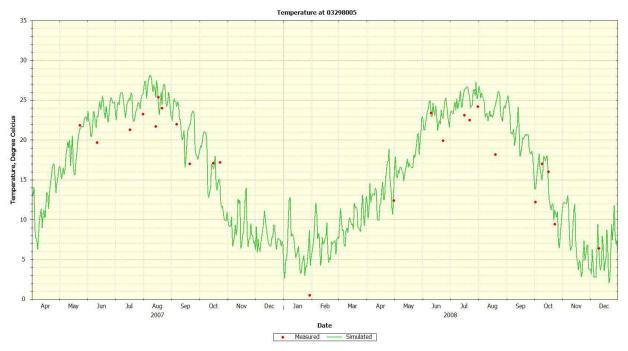


Figure A-15 Modeled vs. Observed TEMP (°C) at 03298005

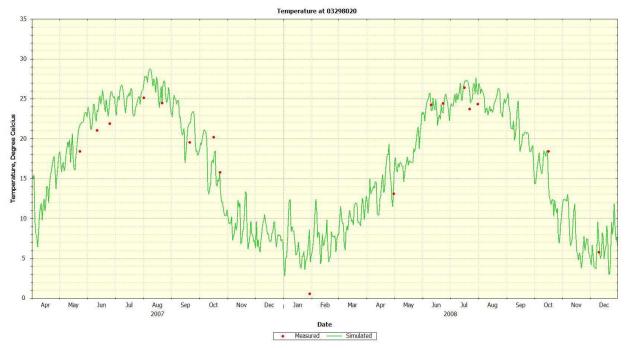


Figure A-16 Modeled vs. Observed TEMP (°C) at 03298020

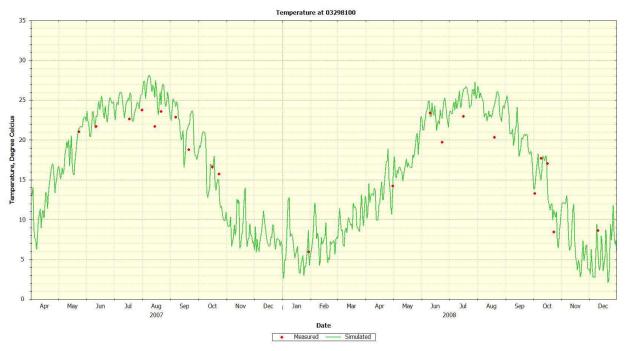


Figure A-17 Modeled vs. Observed TEMP (°C) at 03298100

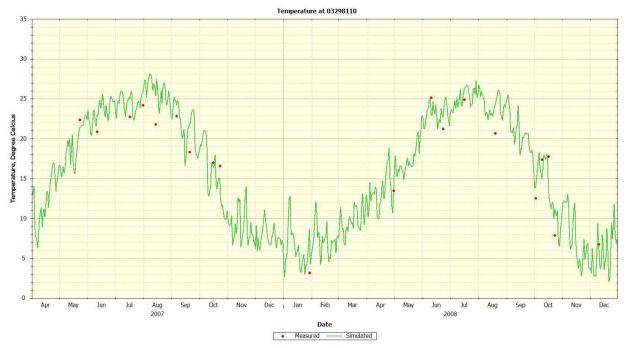


Figure A-18 Modeled vs. Observed TEMP (°C) at 03298110

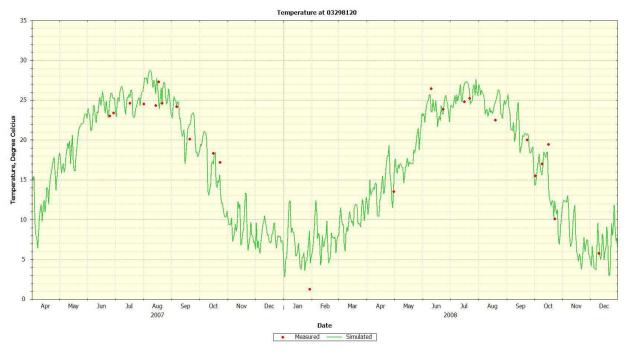


Figure A-19 Modeled vs. Observed TEMP (°C) at 03298120

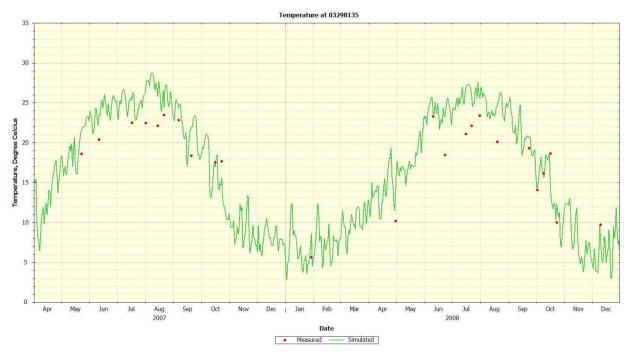


Figure A-20 Modeled vs. Observed TEMP (°C) at 03298135

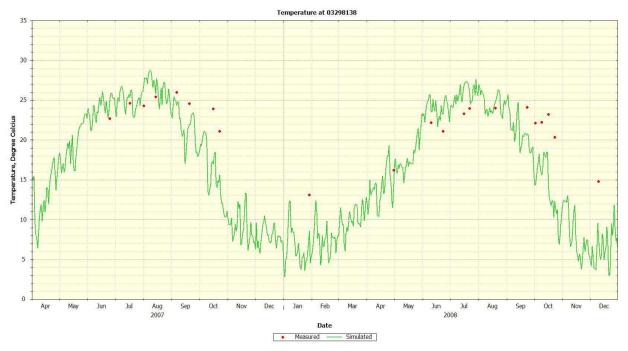


Figure A-21 Modeled vs. Observed TEMP (°C) at 03298138

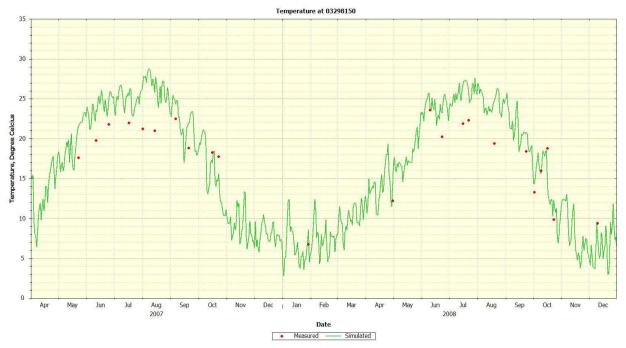


Figure A-22 Modeled vs. Observed TEMP (°C) at 03298150

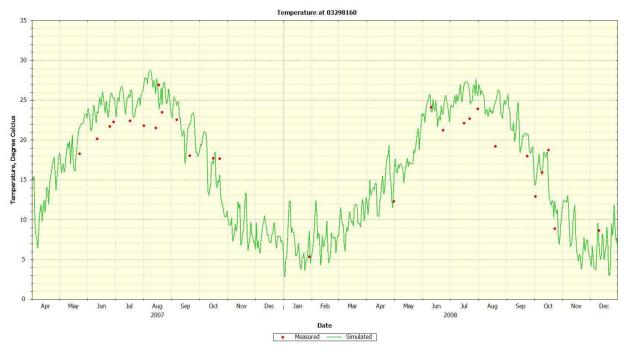


Figure A-23 Modeled vs. Observed TEMP (°C) at 03298160

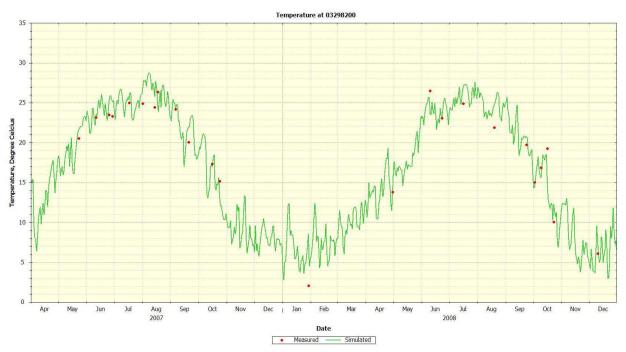


Figure A-24 Modeled vs. Observed TEMP (°C) at 03298200

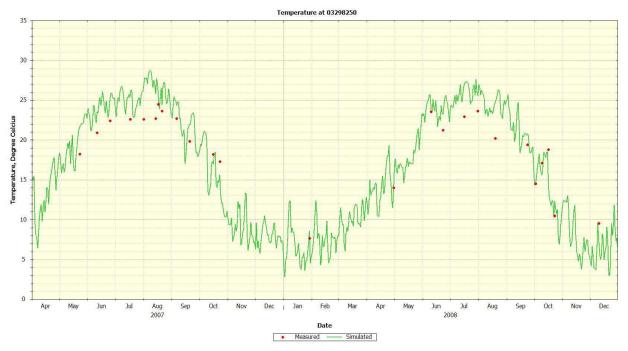


Figure A-25 Modeled vs. Observed TEMP (°C) at 03298250

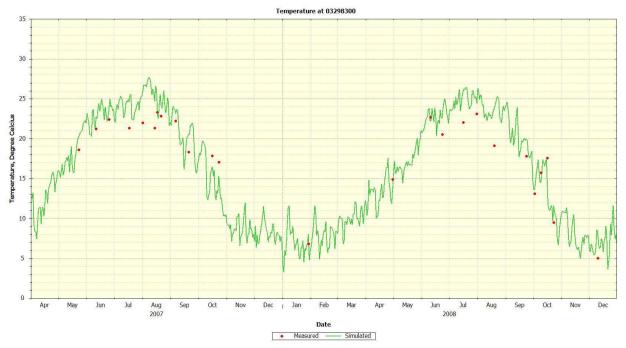


Figure A-26 Modeled vs. Observed TEMP (°C) at 03298300

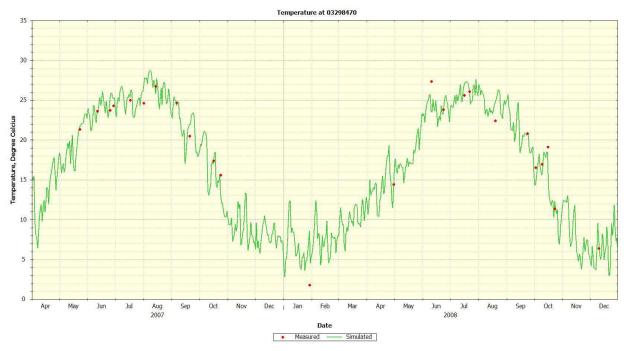


Figure A-27 Modeled vs. Observed TEMP (°C) at 03298470

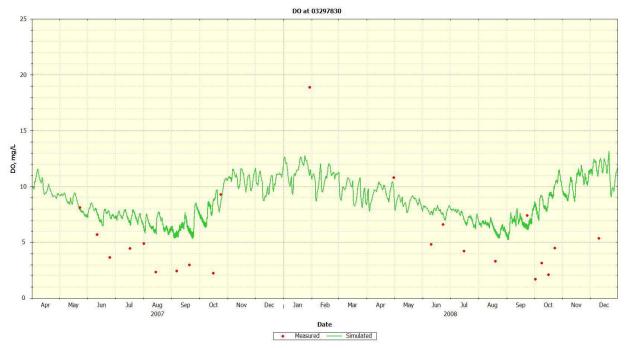


Figure A-28 Modeled vs. Observed DO (mg/L) at 03297830

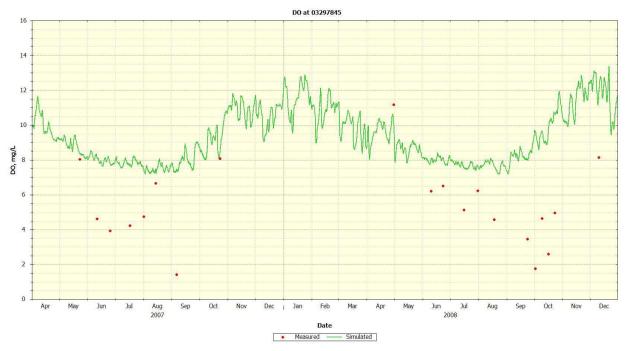


Figure A-29 Modeled vs. Observed DO (mg/L) at 03297845

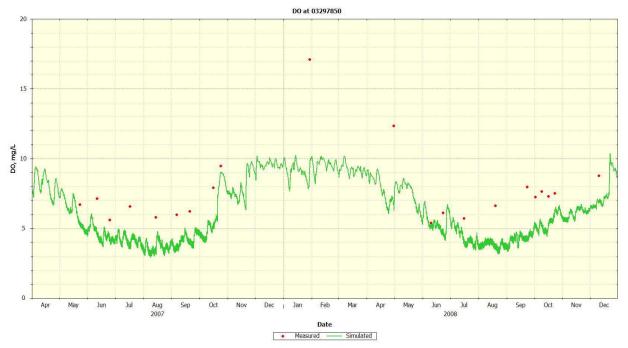


Figure A-30 Modeled vs. Observed DO (mg/L) at 03297850

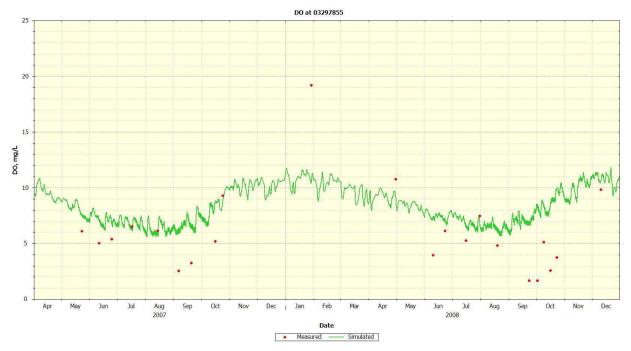


Figure A-31 Modeled vs. Observed DO (mg/L) at 03297855

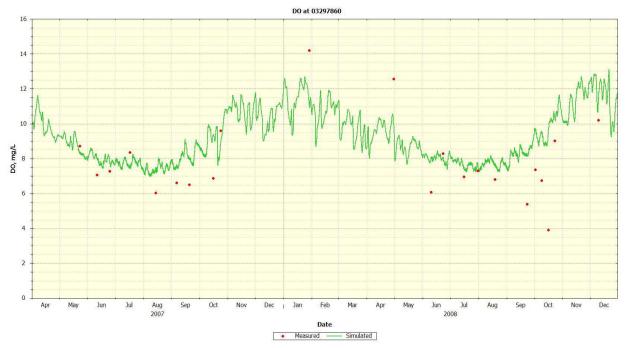


Figure A-32 Modeled vs. Observed DO (mg/L) at 03297860



Figure A-33 Modeled vs. Observed DO (mg/L) at 03297875

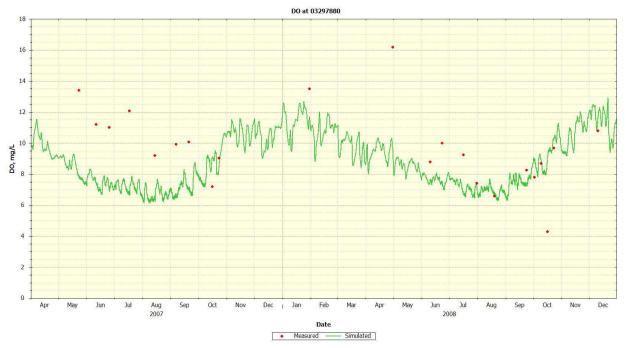


Figure A-34 Modeled vs. Observed DO (mg/L) at 03297880

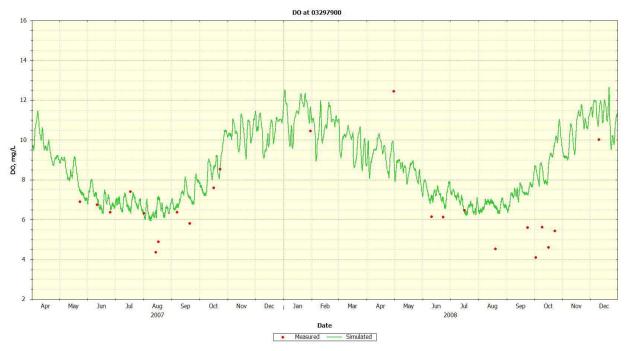


Figure A-35 Modeled vs. Observed DO (mg/L) at 03297900

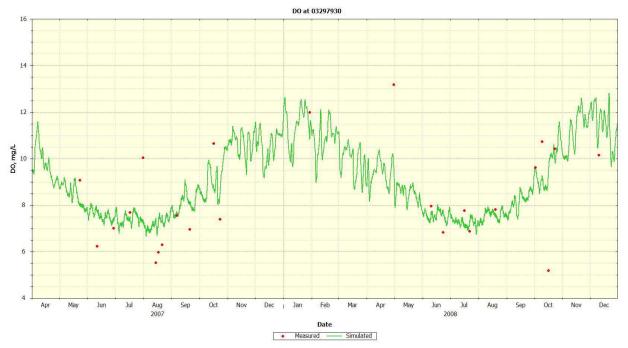


Figure A-36 Modeled vs. Observed DO (mg/L) at 03297930

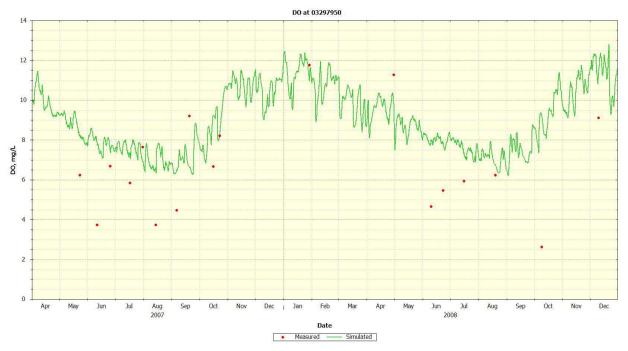


Figure A-37 Modeled vs. Observed DO (mg/L) at 03297950

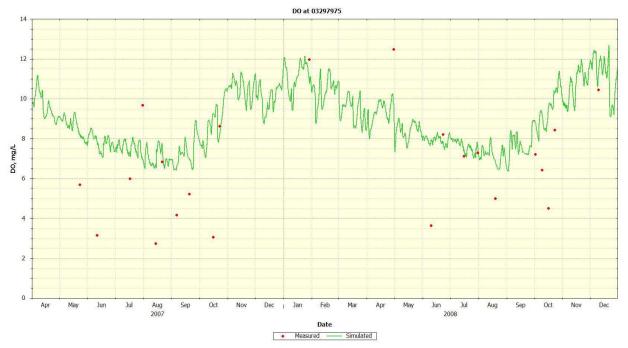


Figure A-38 Modeled vs. Observed DO (mg/L) at 03297975

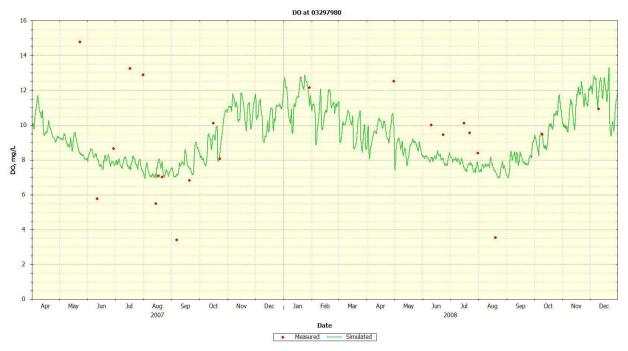


Figure A-39 Modeled vs. Observed DO (mg/L) at 03297980

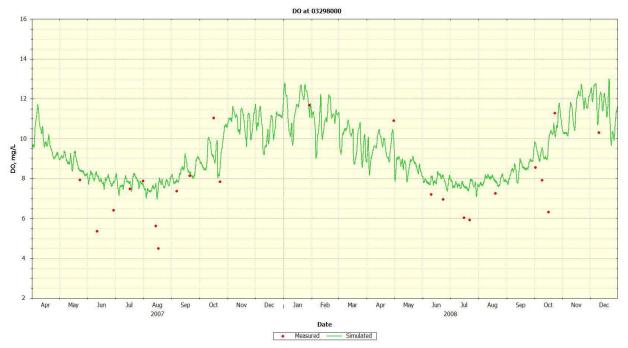


Figure A-40 Modeled vs. Observed DO (mg/L) at 03298000

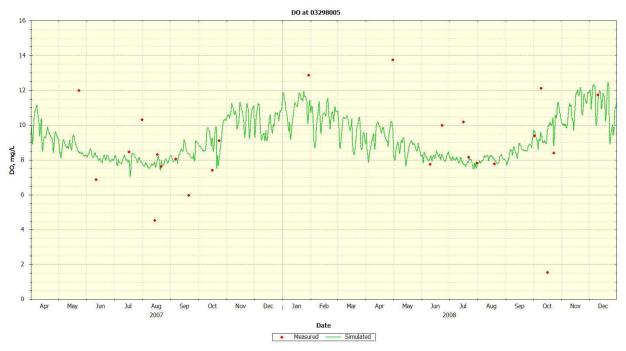


Figure A-41 Modeled vs. Observed DO (mg/L) at 03298005



Figure A-42 Modeled vs. Observed DO (mg/L) at 03298020

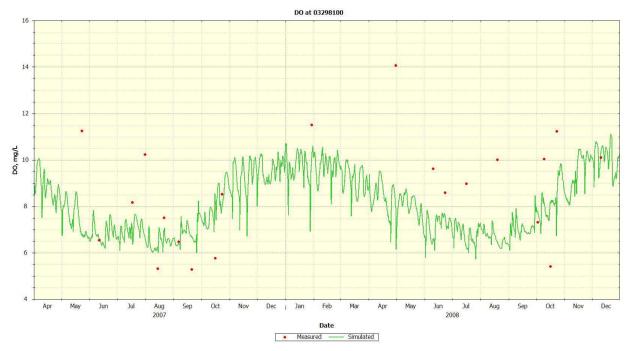


Figure A-43 Modeled vs. Observed DO (mg/L) at 03298100

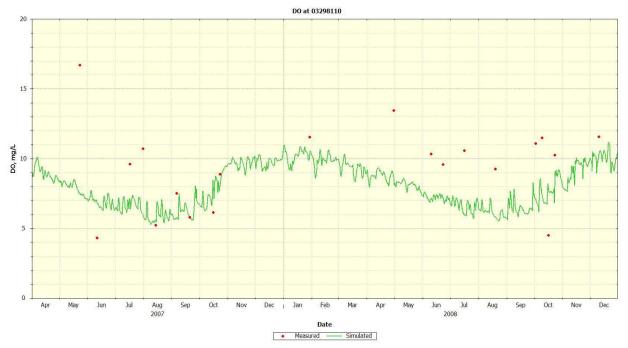


Figure A-44 Modeled vs. Observed DO (mg/L) at 03298110

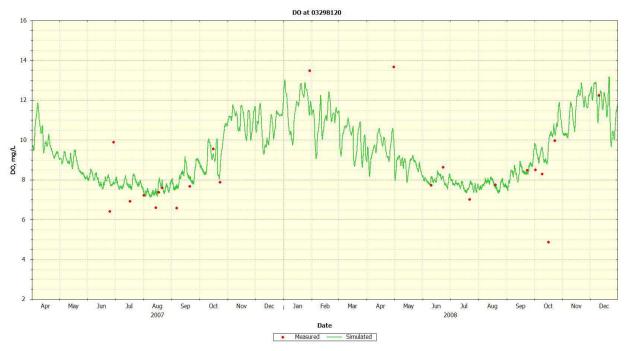


Figure A-45 Modeled vs. Observed DO (mg/L) at 03298120

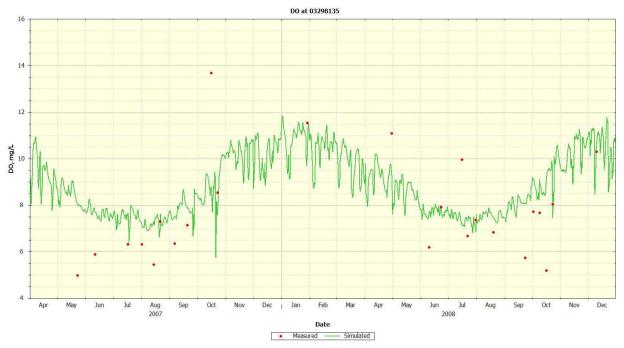


Figure A-46 Modeled vs. Observed DO (mg/L) at 03298135

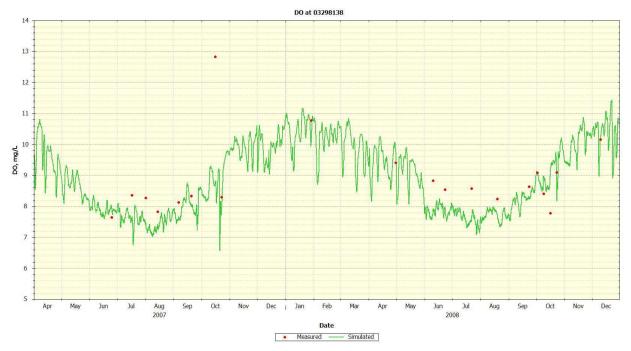


Figure A-47 Modeled vs. Observed DO (mg/L) at 03298138

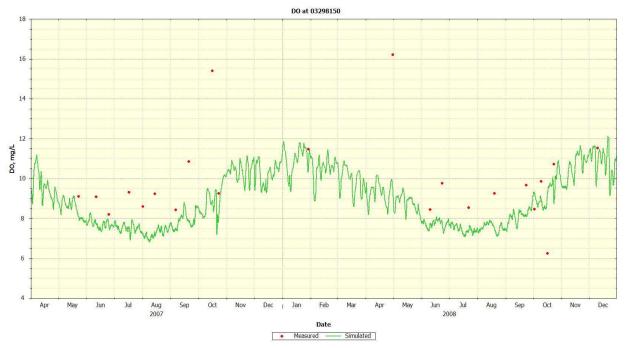


Figure A-48 Modeled vs. Observed DO (mg/L) at 03298150

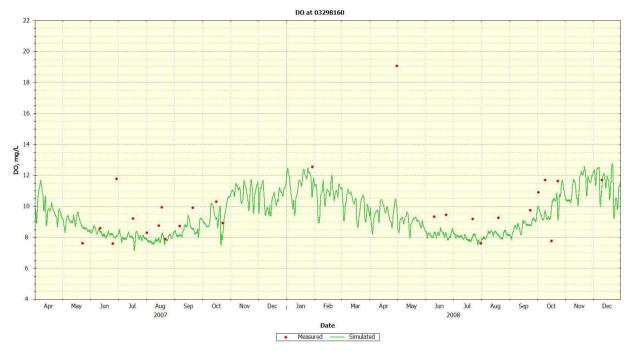


Figure A-49 Modeled vs. Observed DO (mg/L) at 03298160

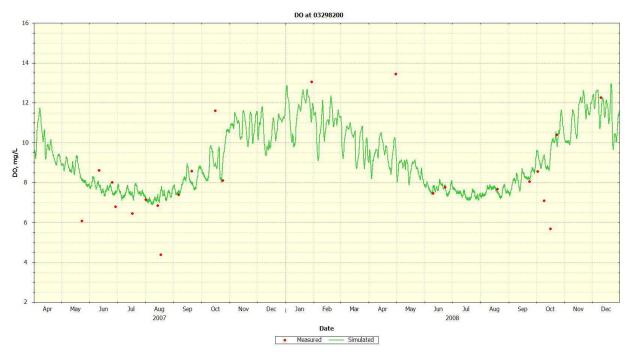


Figure A-50 Modeled vs. Observed DO (mg/L) at 03298200

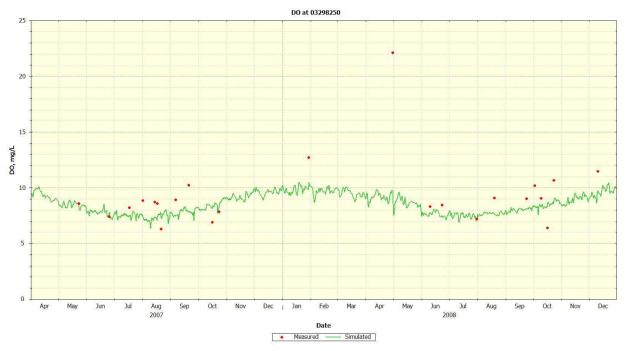


Figure A-51 Modeled vs. Observed DO (mg/L) at 03298250

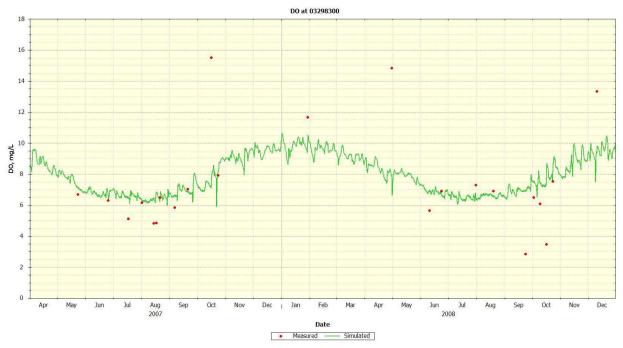


Figure A-52 Modeled vs. Observed DO (mg/L) at 03298300

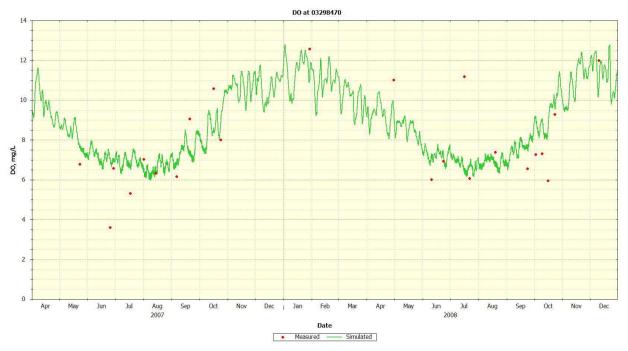


Figure A-53 Modeled vs. Observed DO (mg/L) at 03298470

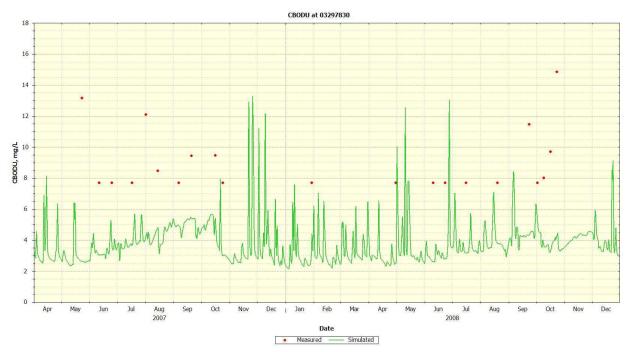


Figure A-54 Modeled vs. Observed CBOD (mg/L) at 03297830

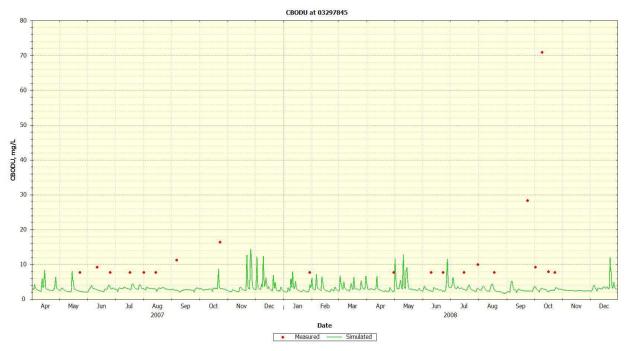


Figure A-55 Modeled vs. Observed CBOD (mg/L) at 03297845

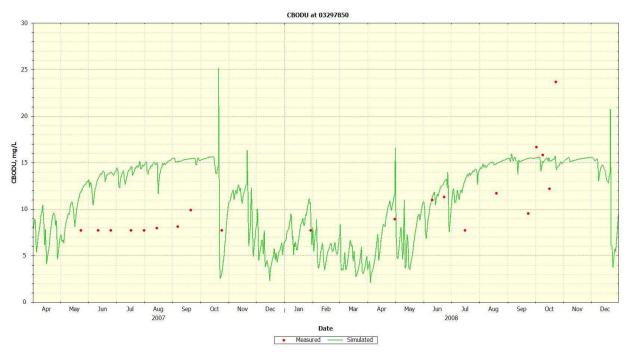


Figure A-56 Modeled vs. Observed CBOD (mg/L) at 03297850

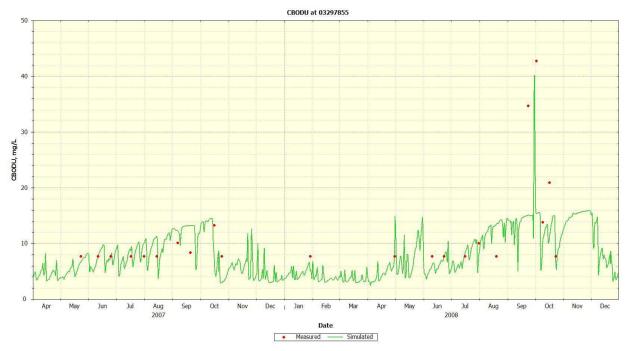


Figure A-57 Modeled vs. Observed CBOD (mg/L) at 03297855

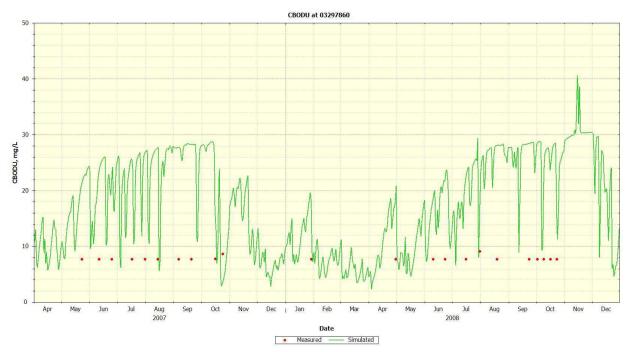


Figure A-58 Modeled vs. Observed CBOD (mg/L) at 03297860

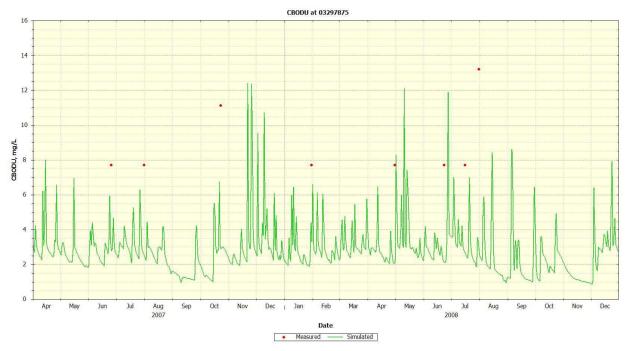


Figure A-59 Modeled vs. Observed CBOD (mg/L) at 03297875

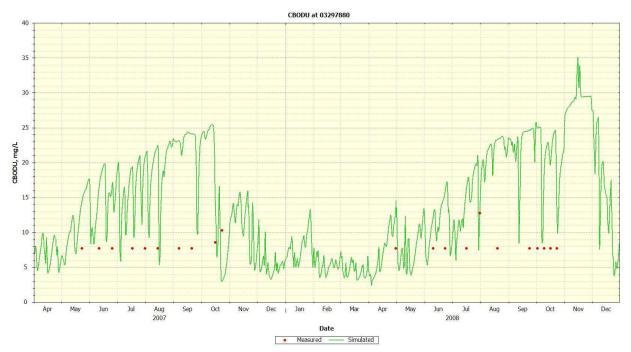


Figure A-60 Modeled vs. Observed CBOD (mg/L) at 03297880

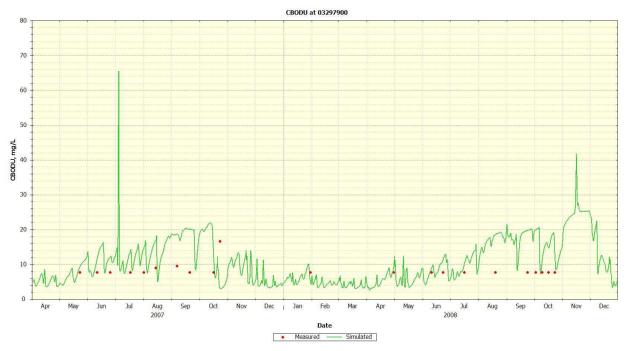


Figure A-61 Modeled vs. Observed CBOD (mg/L) at 03297900

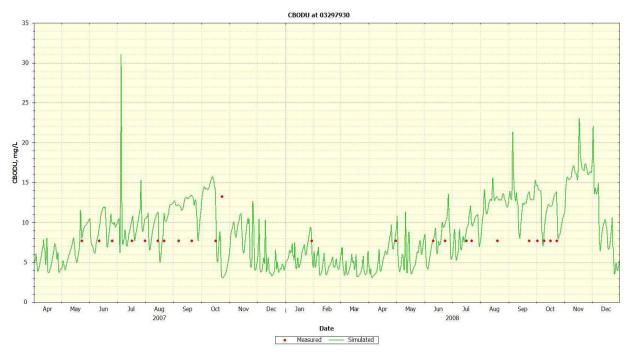


Figure A-62 Modeled vs. Observed CBOD (mg/L) at 03297930

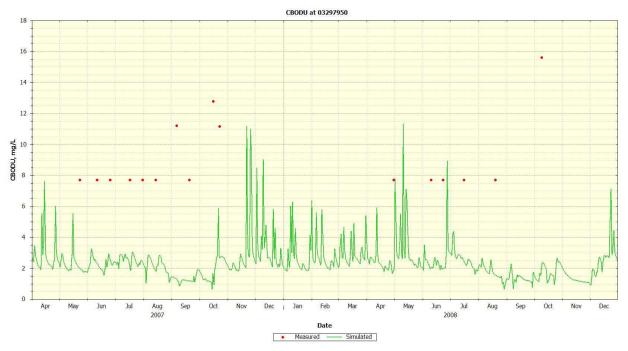


Figure A-63 Modeled vs. Observed CBOD (mg/L) at 03297950

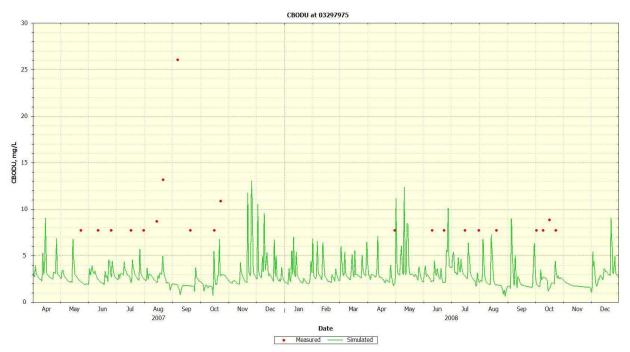


Figure A-64 Modeled vs. Observed CBOD (mg/L) at 03297975

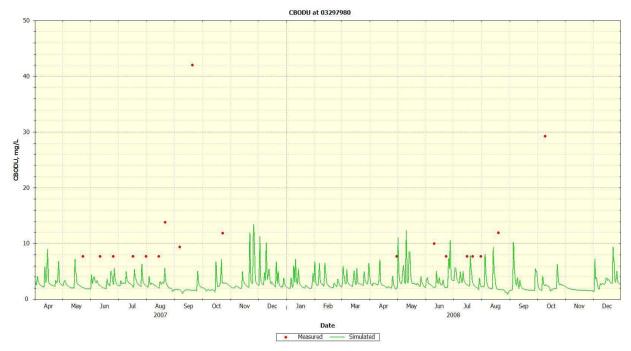


Figure A-65 Modeled vs. Observed CBOD (mg/L) at 03297980

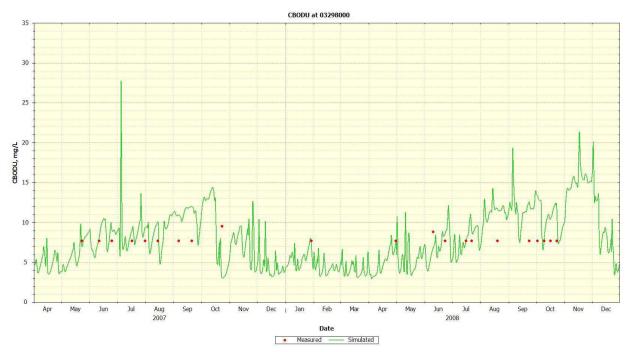


Figure A-66 Modeled vs. Observed CBOD (mg/L) at 03298000

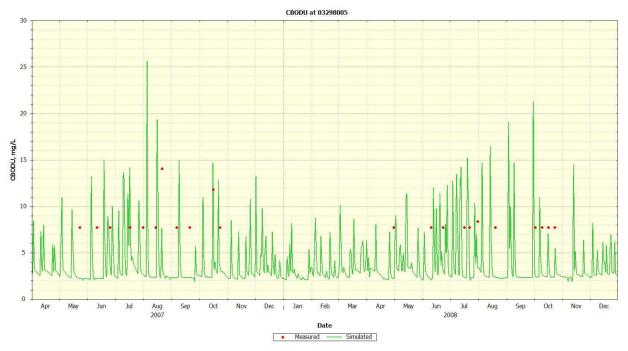


Figure A-67 Modeled vs. Observed CBOD (mg/L) at 03298005

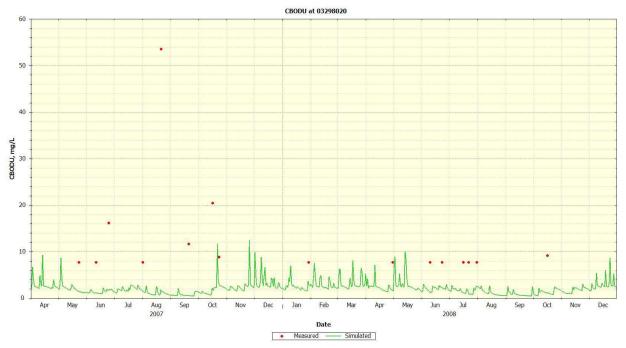


Figure A-68 Modeled vs. Observed CBOD (mg/L) at 03298020

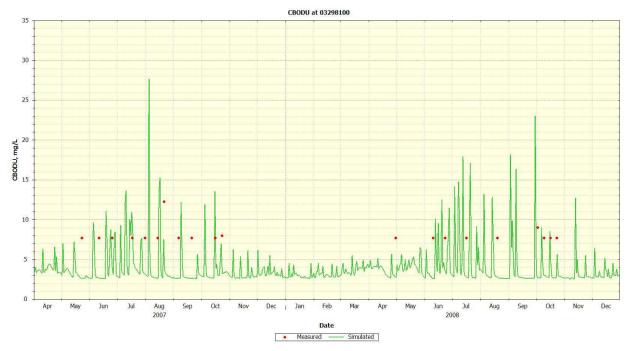


Figure A-69 Modeled vs. Observed CBOD (mg/L) at 03298100

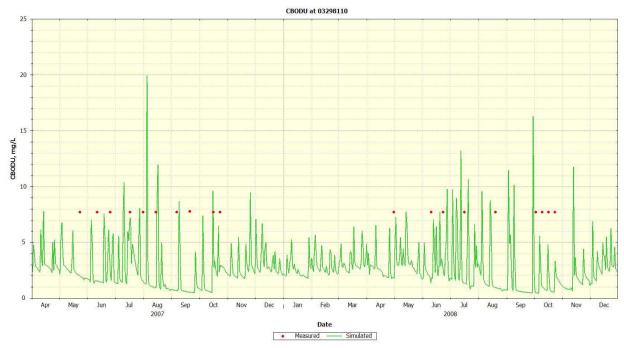


Figure A-70 Modeled vs. Observed CBOD (mg/L) at 03298110

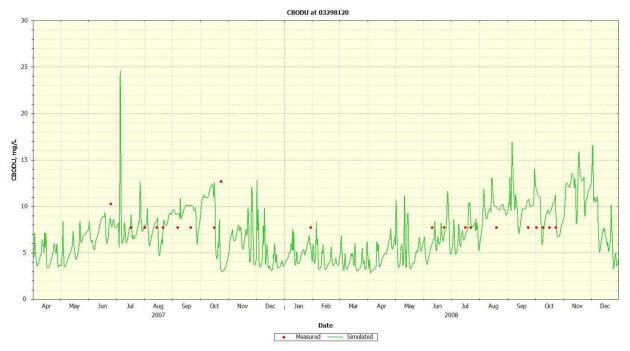


Figure A-71 Modeled vs. Observed CBOD (mg/L) at 03298120

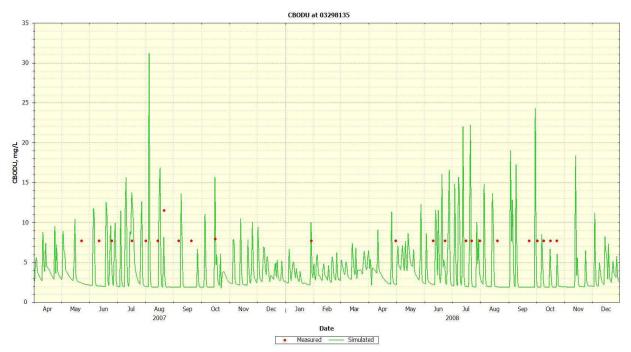


Figure A-72 Modeled vs. Observed CBOD (mg/L) at 03298135

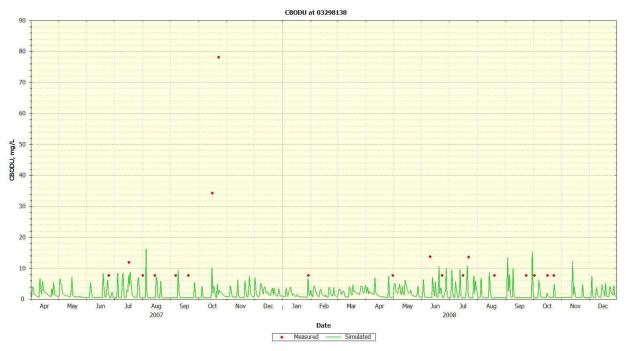


Figure A-73 Modeled vs. Observed CBOD (mg/L) at 03298138

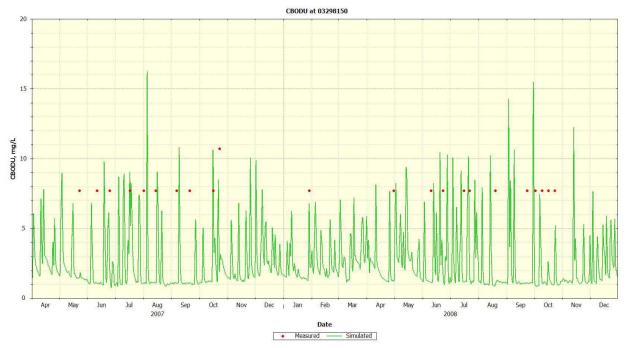


Figure A-74 Modeled vs. Observed CBOD (mg/L) at 03298150

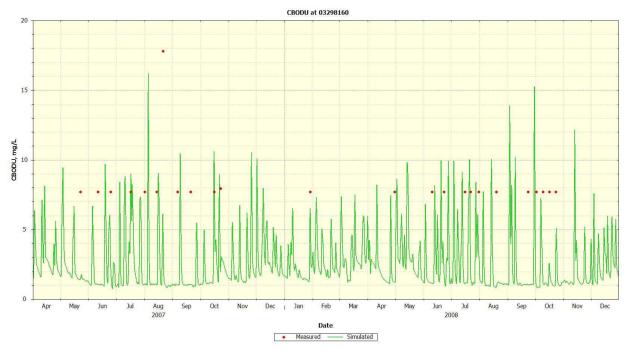


Figure A-75 Modeled vs. Observed CBOD (mg/L) at 03298160

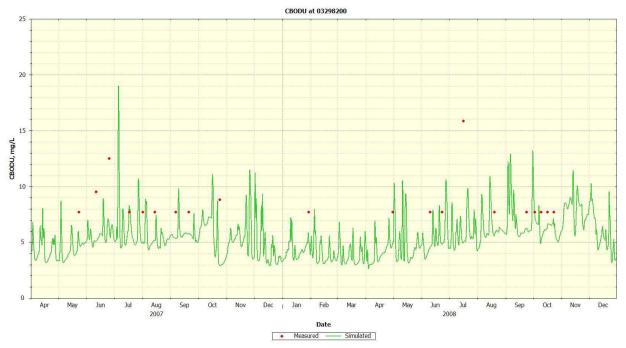


Figure A-76 Modeled vs. Observed CBOD (mg/L) at 03298200

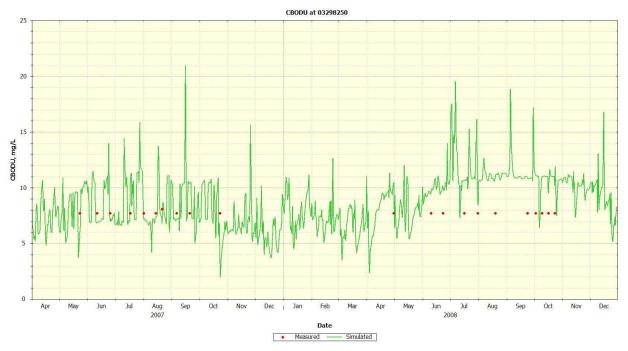


Figure A-77 Modeled vs. Observed CBOD (mg/L) at 03298250

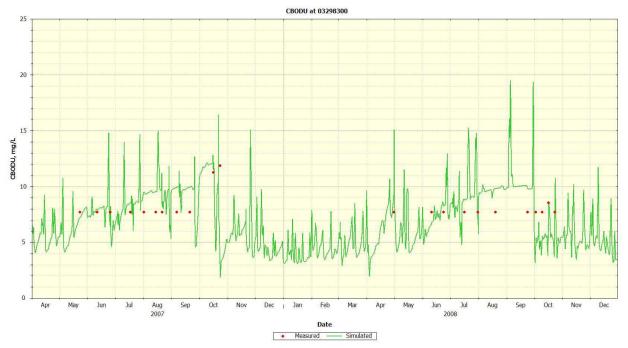


Figure A-78 Modeled vs. Observed CBOD (mg/L) at 03298300

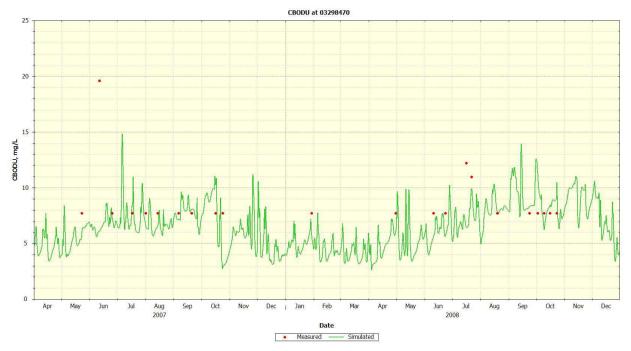


Figure A-79 Modeled vs. Observed CBOD (mg/L) at 03298470

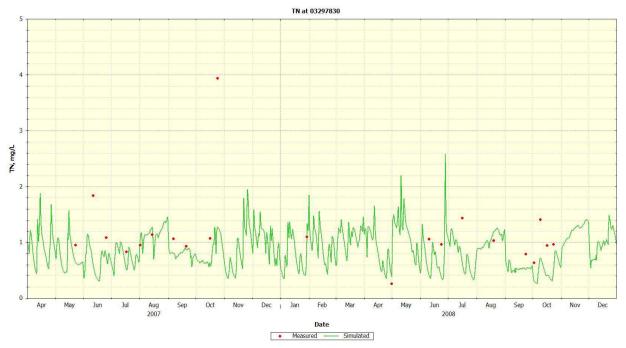


Figure A-80 Modeled vs. Observed TN (mg/L) at 03297830

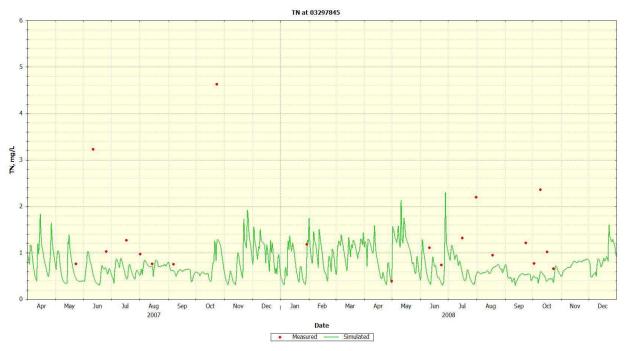


Figure A-81 Modeled vs. Observed TN (mg/L) at 03297845

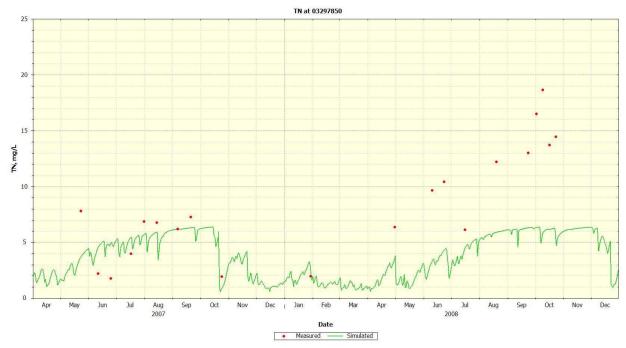


Figure A-82 Modeled vs. Observed TN (mg/L) at 03297850

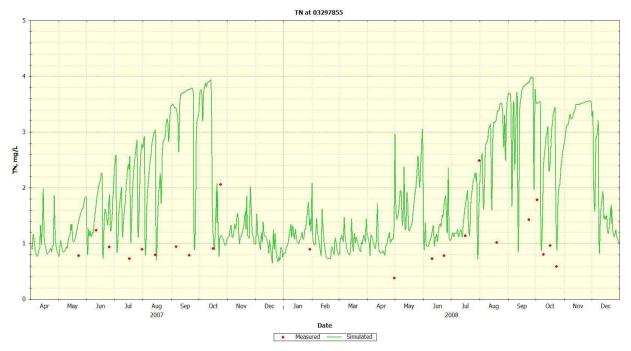


Figure A-83 Modeled vs. Observed TN (mg/L) at 03297855

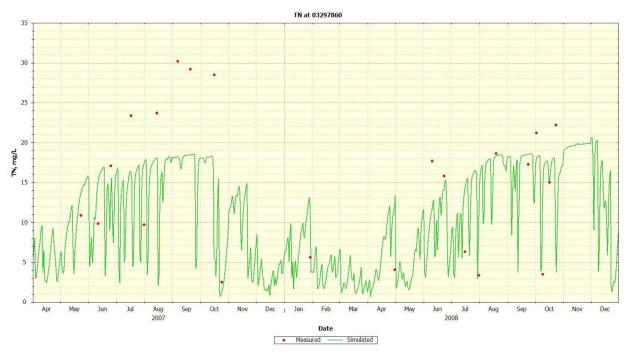


Figure A-84 Modeled vs. Observed TN (mg/L) at 03297860

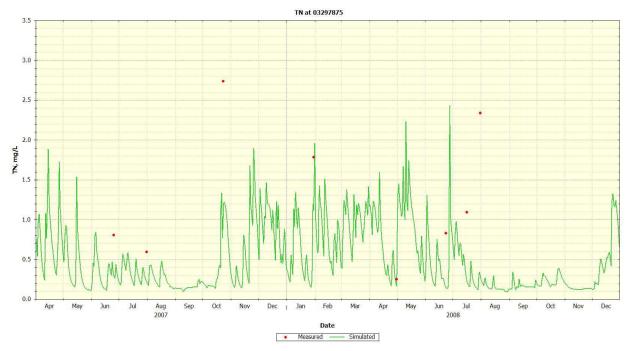


Figure A-85 Modeled vs. Observed TN (mg/L) at 03297875

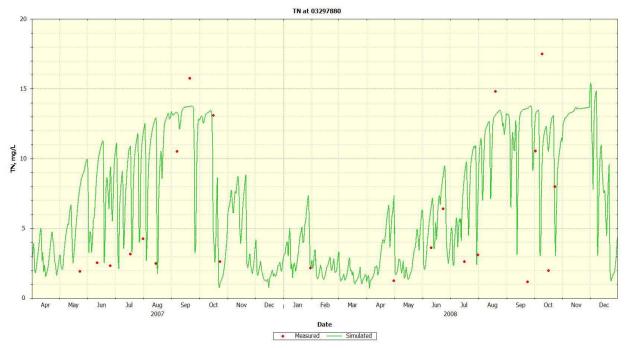


Figure A-86 Modeled vs. Observed TN (mg/L) at 03297880

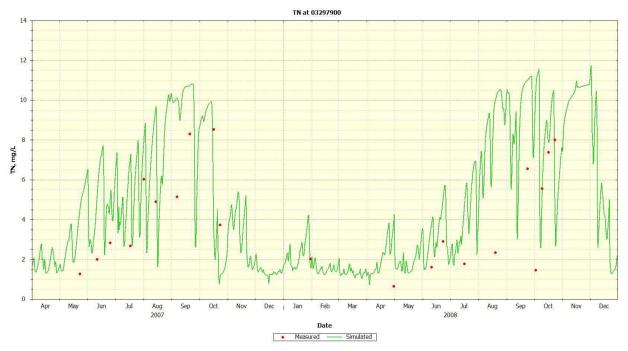


Figure A-87 Modeled vs. Observed TN (mg/L) at 03297900

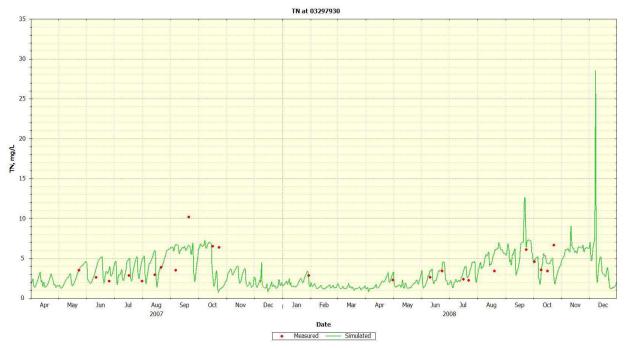


Figure A-88 Modeled vs. Observed TN (mg/L) at 03297930

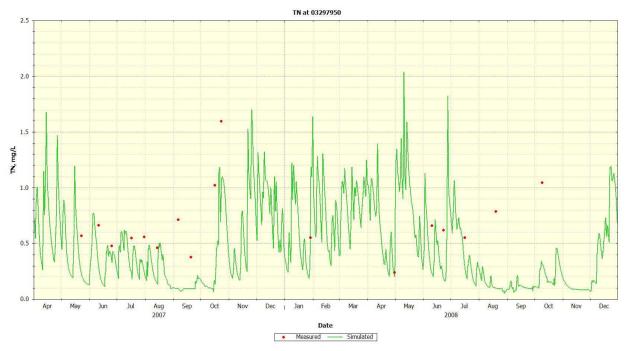


Figure A-89 Modeled vs. Observed TN (mg/L) at 03297950

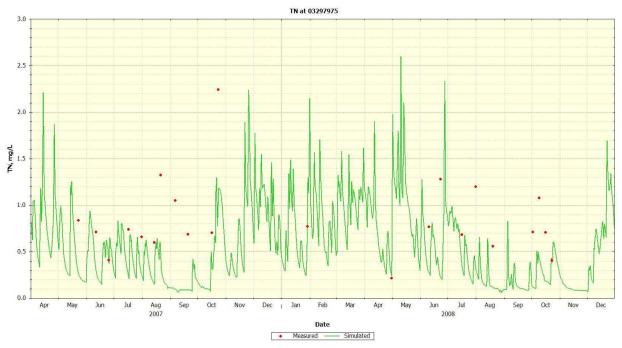


Figure A-90 Modeled vs. Observed TN (mg/L) at 03297975

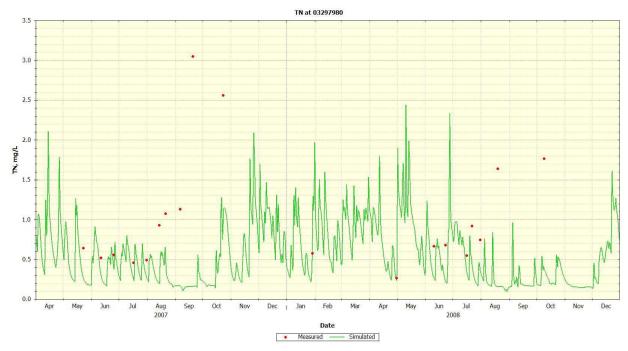


Figure A-91 Modeled vs. Observed TN (mg/L) at 03297980

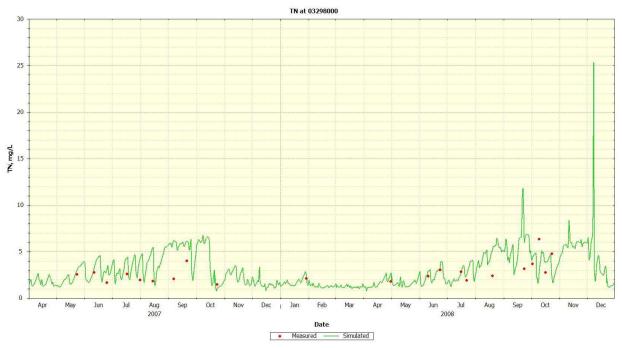


Figure A-92 Modeled vs. Observed TN (mg/L) at 03298000

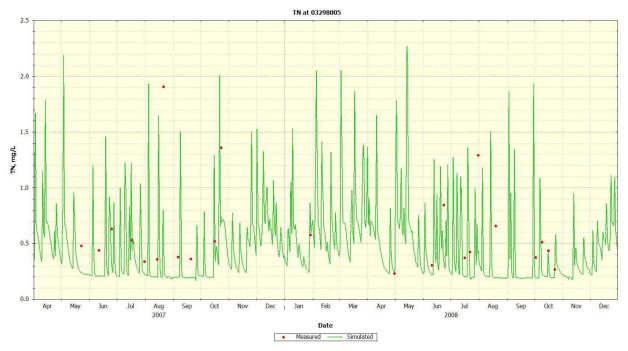


Figure A-93 Modeled vs. Observed TN (mg/L) at 03298005

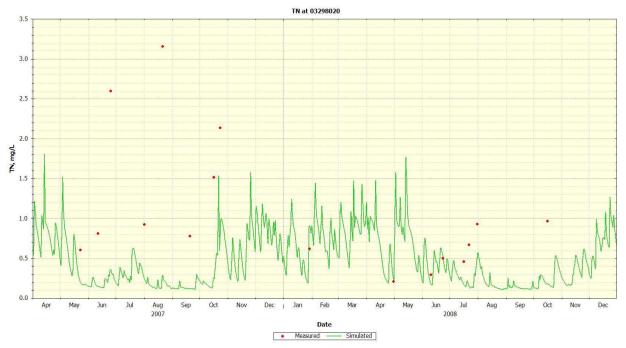


Figure A-94 Modeled vs. Observed TN (mg/L) at 03298020

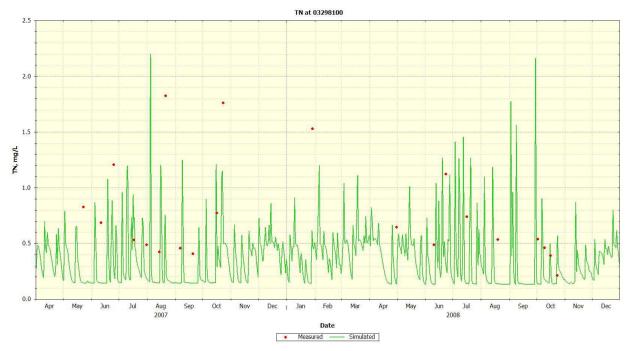


Figure A-95 Modeled vs. Observed TN (mg/L) at 03298100

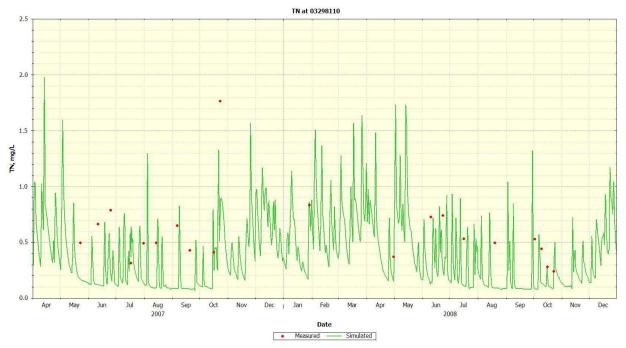


Figure A-96 Modeled vs. Observed TN (mg/L) at 03298110

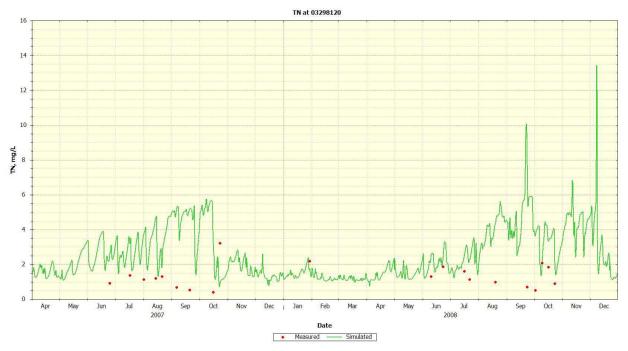


Figure A-97 Modeled vs. Observed TN (mg/L) at 03298120

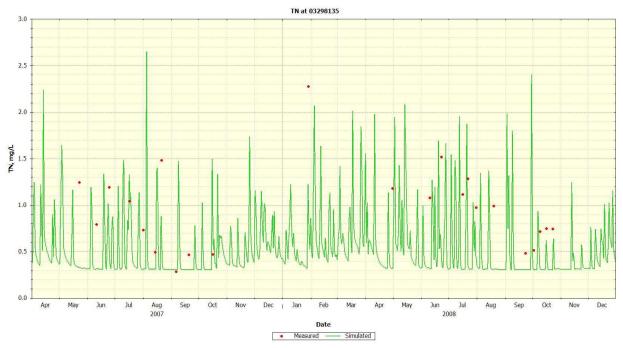


Figure A-98 Modeled vs. Observed TN (mg/L) at 03298135

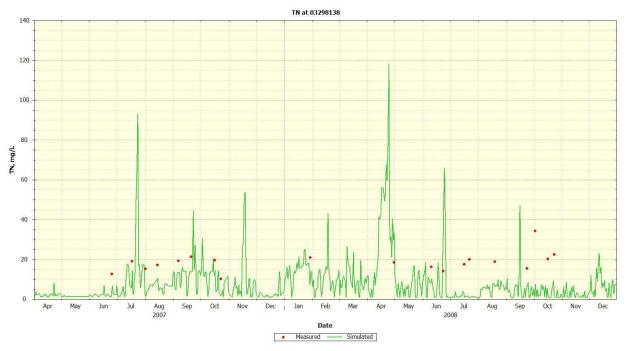


Figure A-99 Modeled vs. Observed TN (mg/L) at 03298138

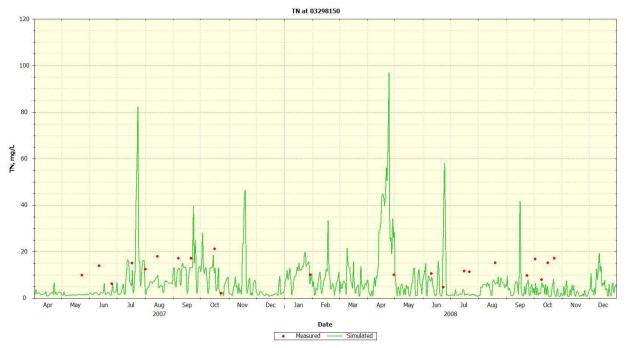


Figure A-100 Modeled vs. Observed TN (mg/L) at 03298150

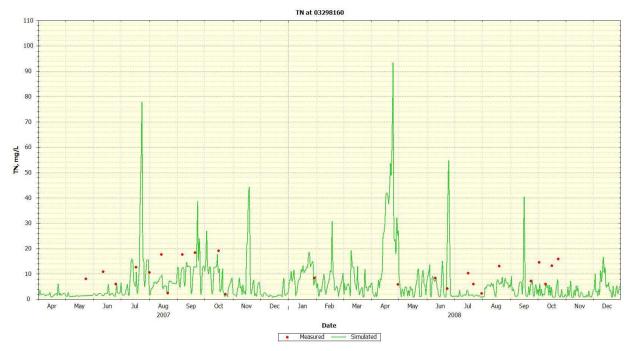


Figure A-101 Modeled vs. Observed TN (mg/L) at 03298160

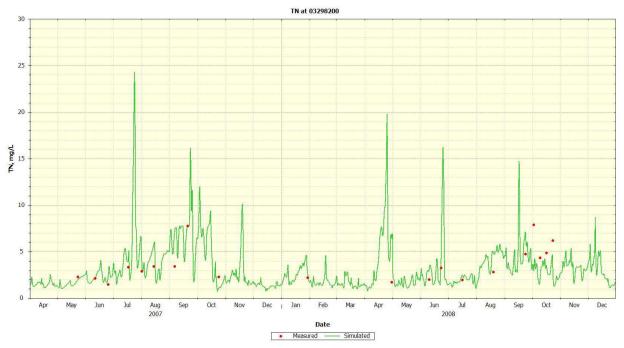


Figure A-102 Modeled vs. Observed TN (mg/L) at 03298200

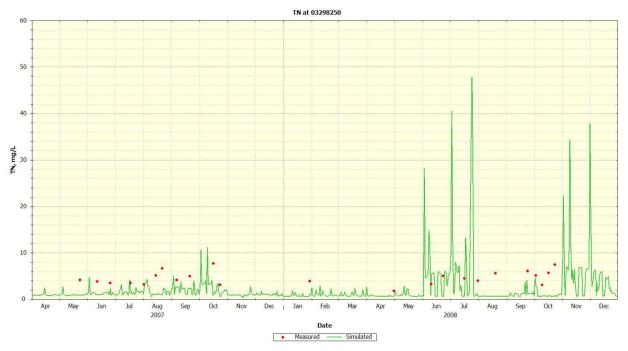


Figure A-103 Modeled vs. Observed TN (mg/L) at 03298250

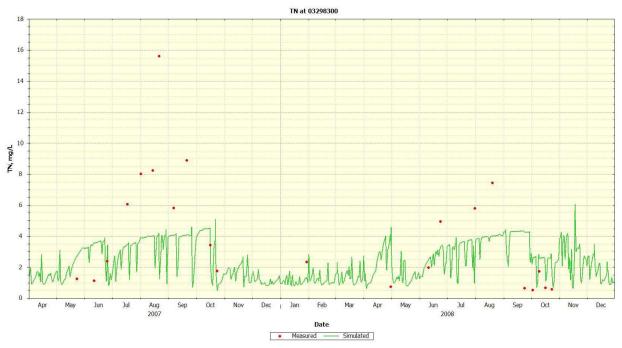


Figure A-104 Modeled vs. Observed TN (mg/L) at 03298300

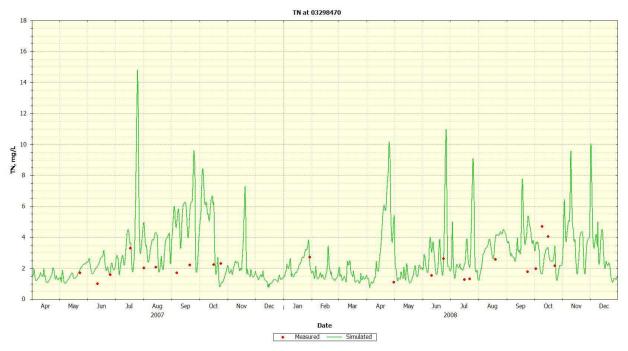


Figure A-105 Modeled vs. Observed TN (mg/L) at 03298470

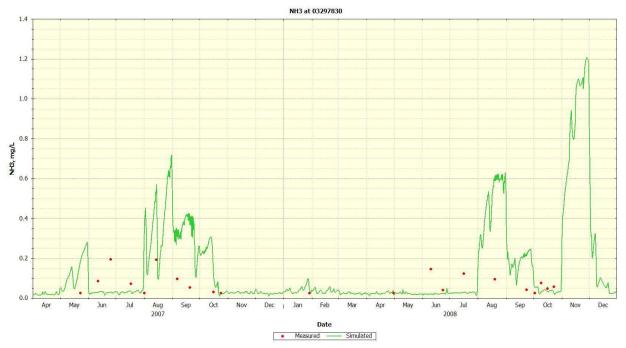


Figure A-106 Modeled vs. Observed  $NH_3$  (mg/L) at 03297830

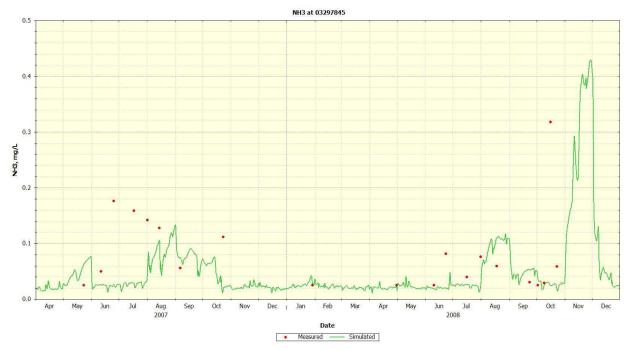


Figure A-107 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297845

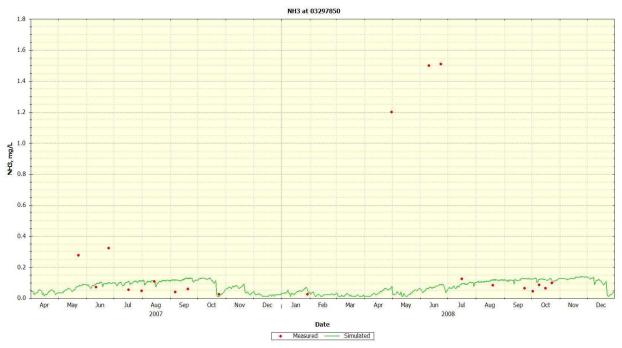


Figure A-108  $\,$  Modeled vs. Observed NH $_3$  (mg/L) at 03297850  $\,$ 

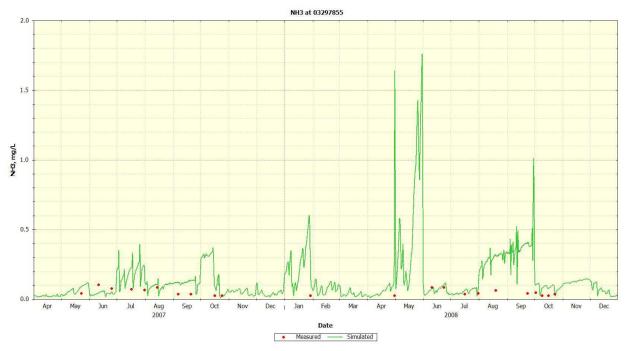


Figure A-109 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297855

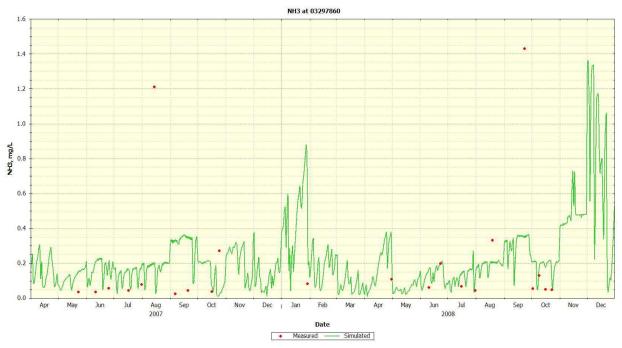


Figure A-110 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297860

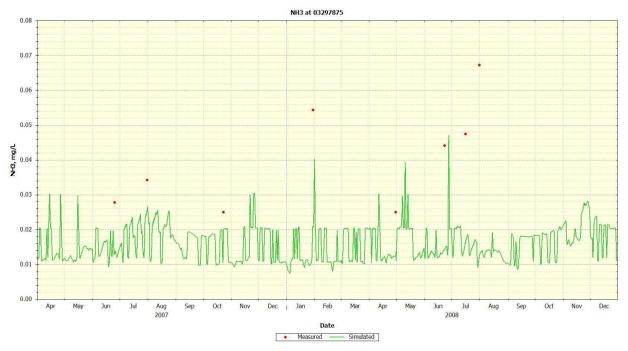


Figure A-111 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297875

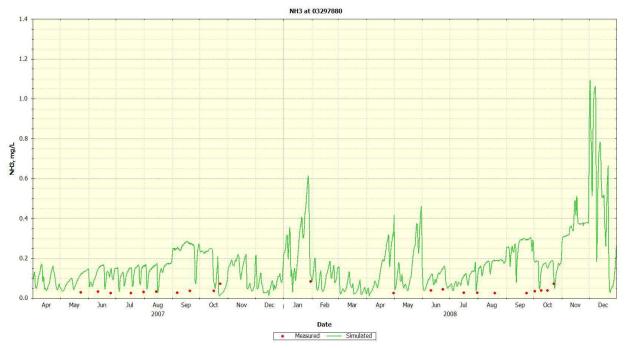


Figure A-112 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297880

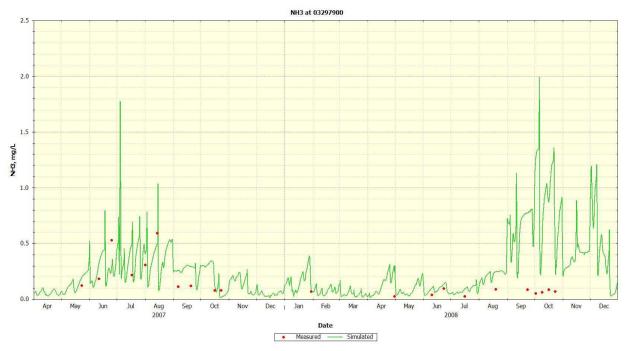


Figure A-113 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297900

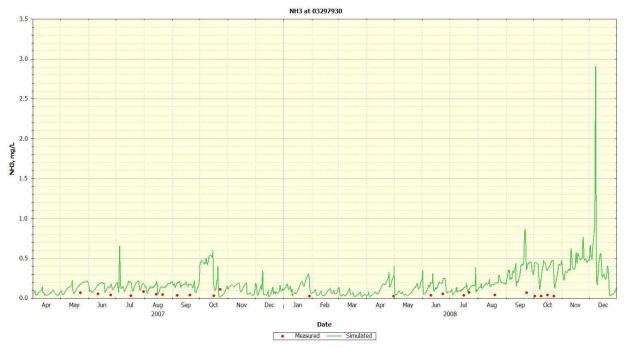


Figure A-114 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297930

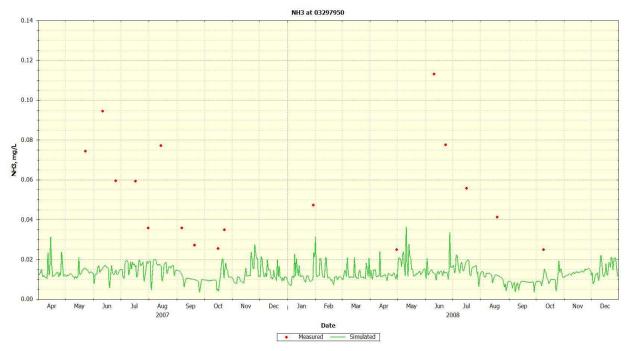


Figure A-115 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297950

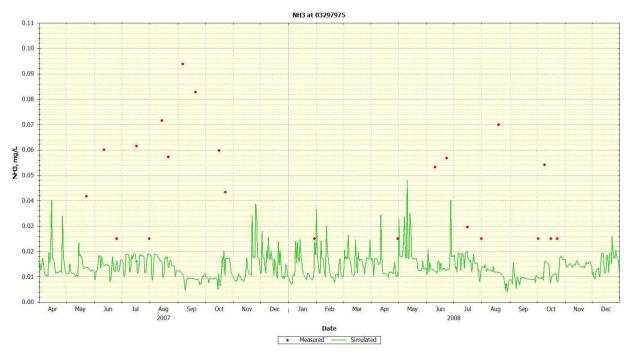


Figure A-116 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297975

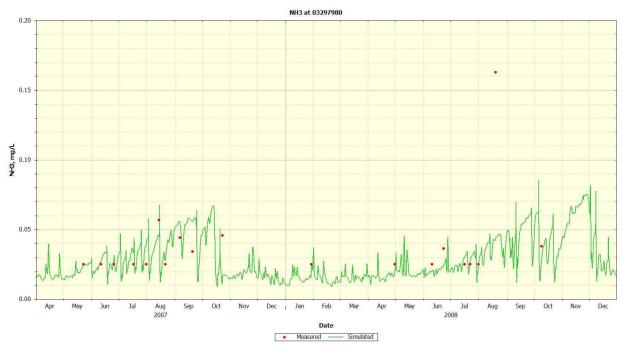


Figure A-117 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03297980

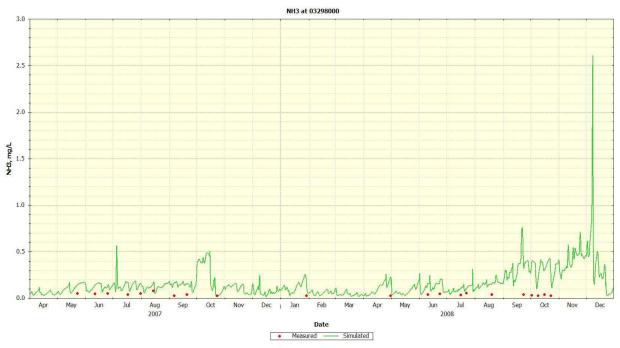


Figure A-118 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298000

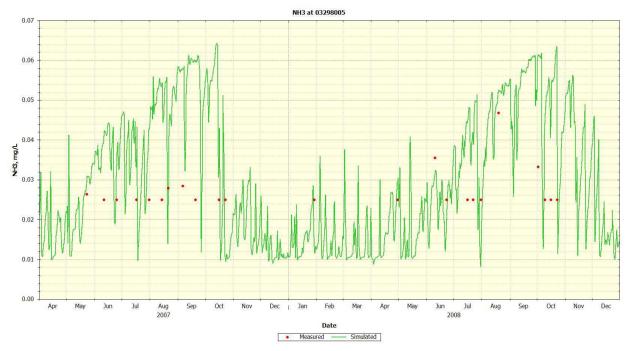


Figure A-119 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298005

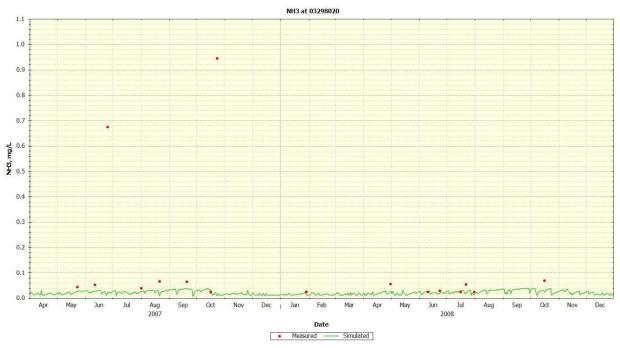


Figure A-120 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298020

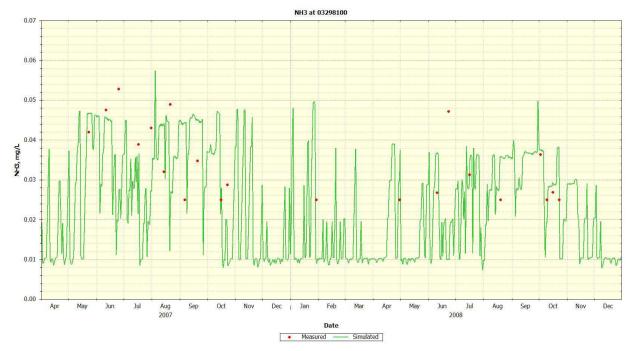


Figure A-121 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298100

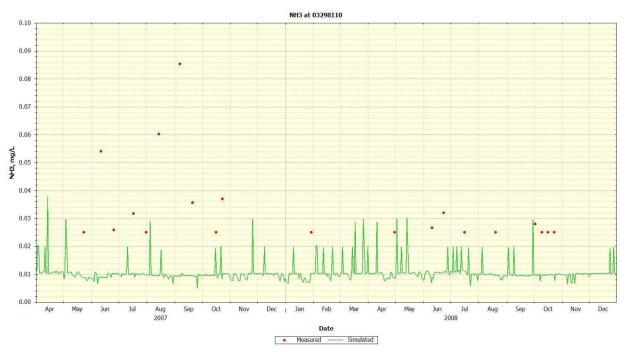


Figure A-122 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298110

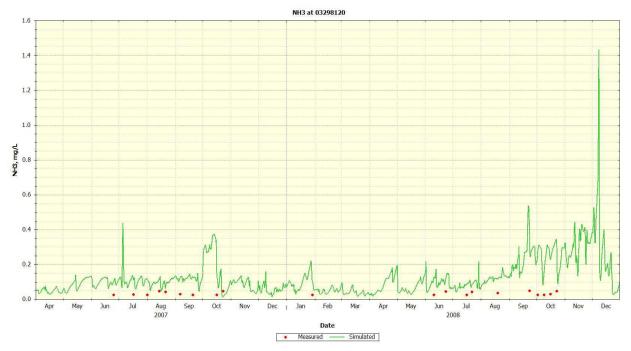


Figure A-123 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298120

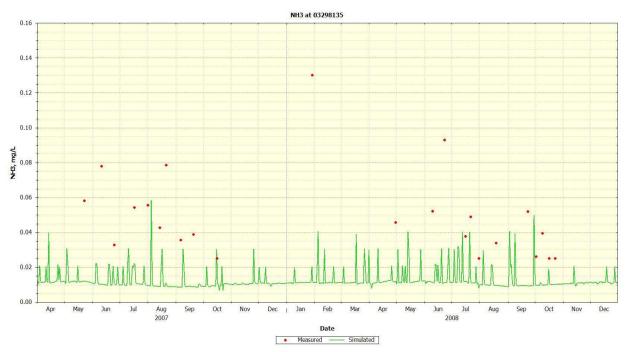


Figure A-124 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298135

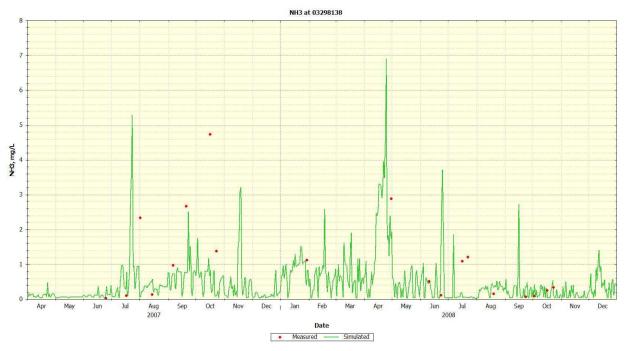


Figure A-125  $\,$  Modeled vs. Observed NH $_3$  (mg/L) at 03298138

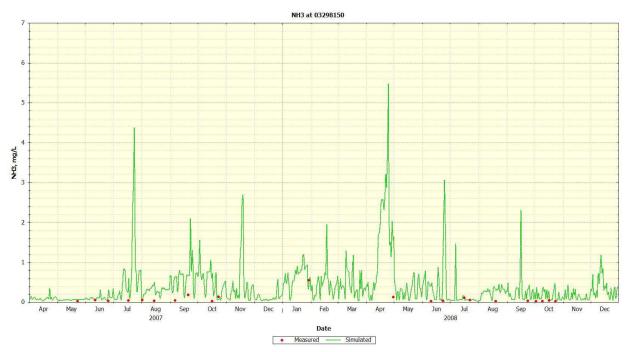


Figure A-126 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298150

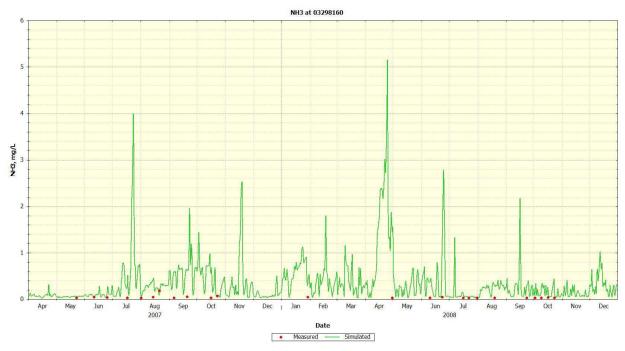


Figure A-127 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298160

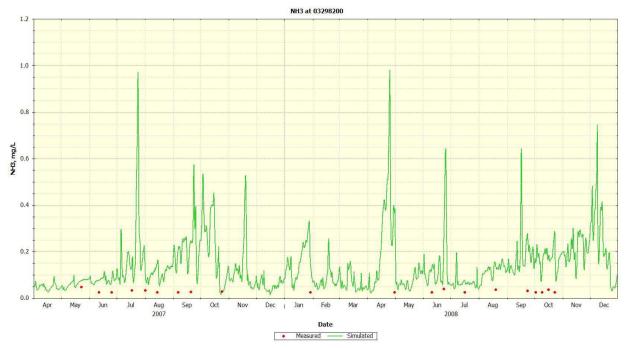


Figure A-128 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298200

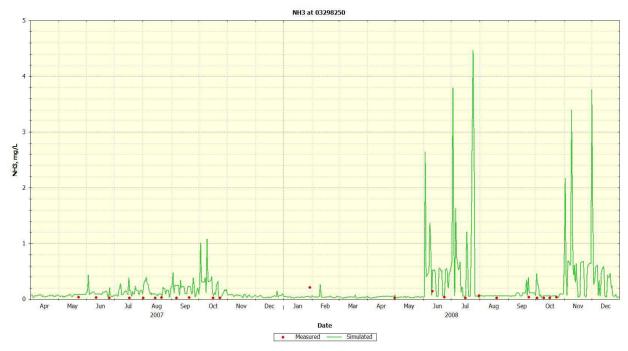


Figure A-129 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298250

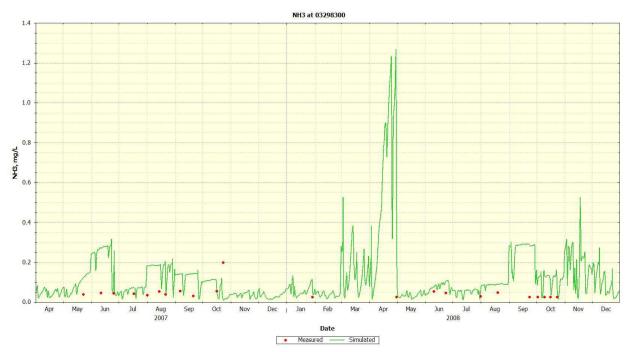


Figure A-130  $\,$  Modeled vs. Observed NH $_3$  (mg/L) at 03298300  $\,$ 

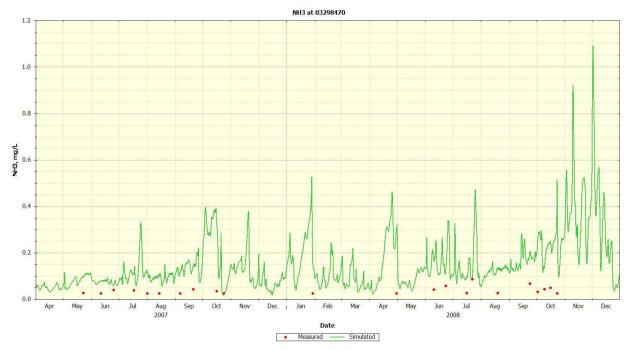


Figure A-131 Modeled vs. Observed NH<sub>3</sub> (mg/L) at 03298470

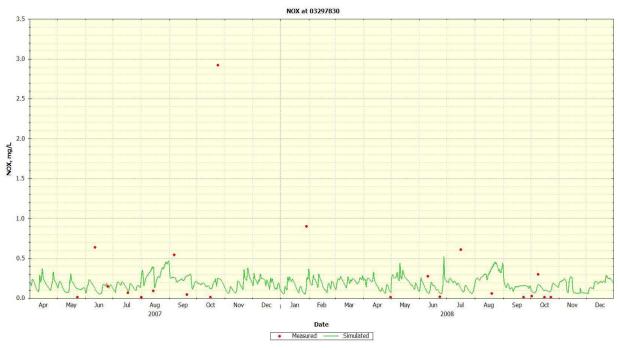


Figure A-132 Modeled vs. Observed  $NO_X$  (mg/L) at 03297830

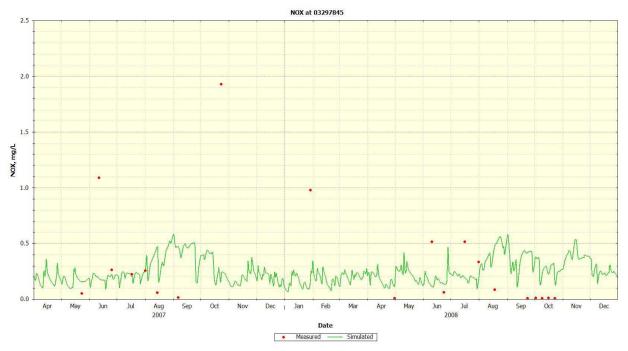


Figure A-133 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297845

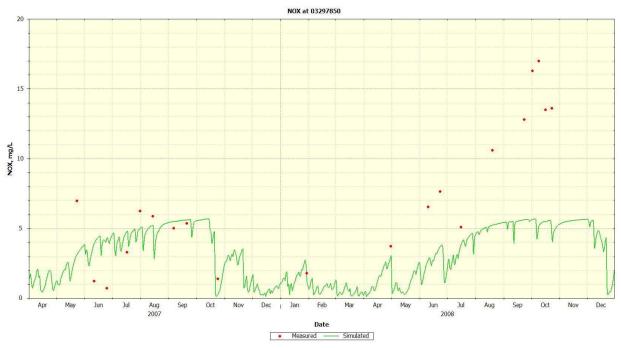


Figure A-134 Modeled vs. Observed  $NO_X$  (mg/L) at 03297850

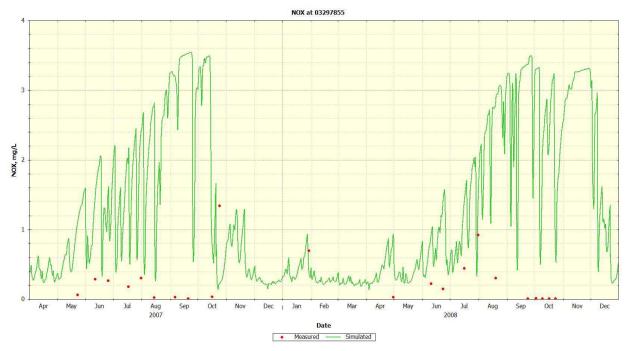


Figure A-135 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297855

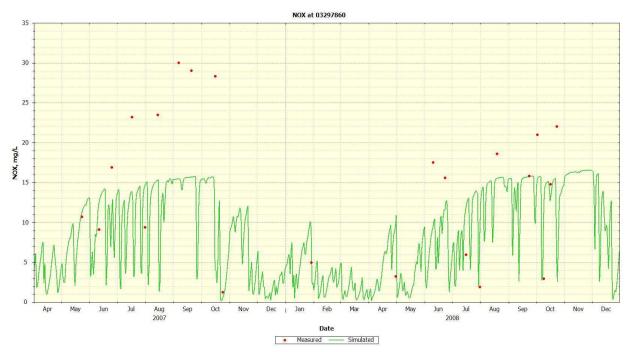


Figure A-136 Modeled vs. Observed  $NO_X$  (mg/L) at 03297860

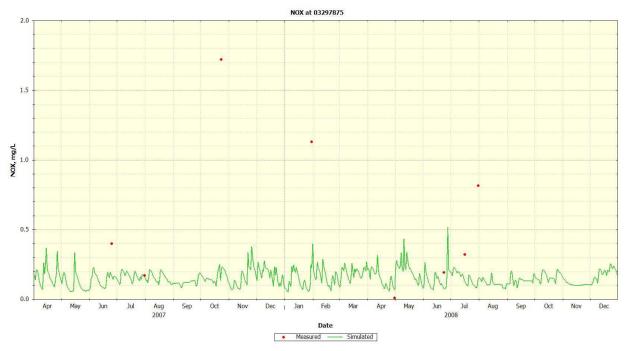


Figure A-137 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297875

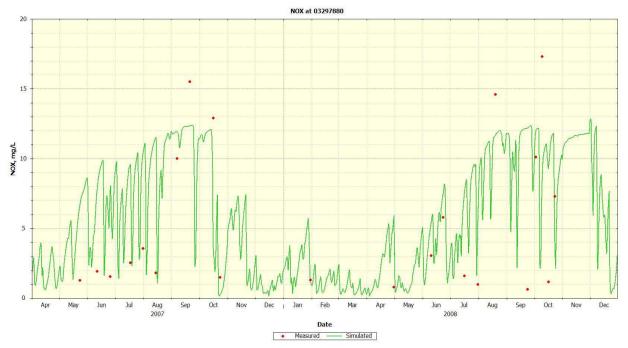


Figure A-138 Modeled vs. Observed  $NO_X$  (mg/L) at 03297880

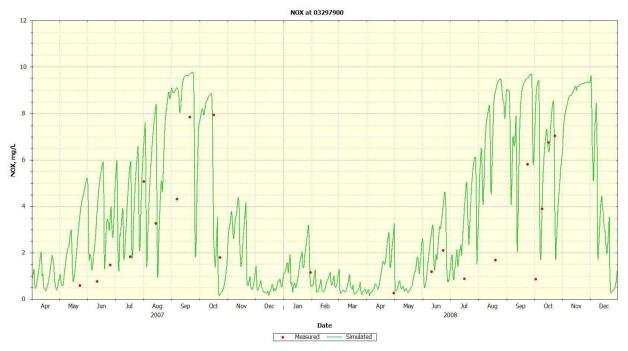


Figure A-139 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297900

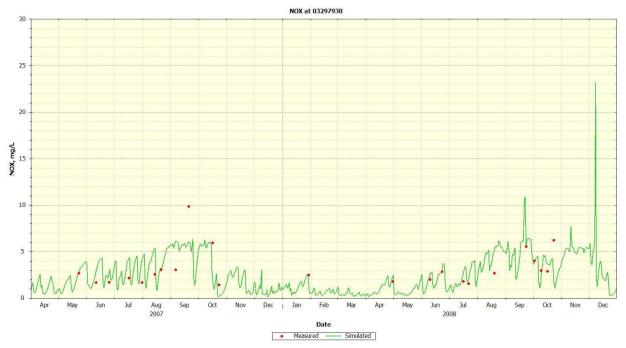


Figure A-140 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297930

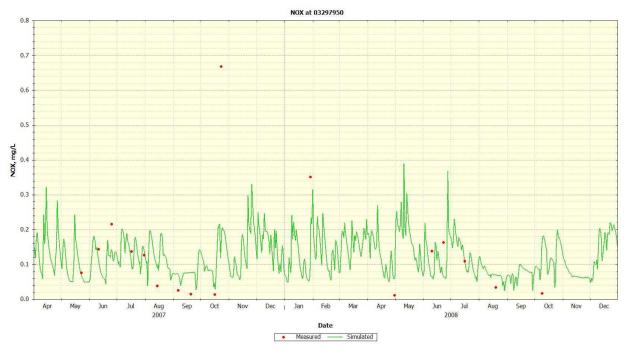


Figure A-141 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297950

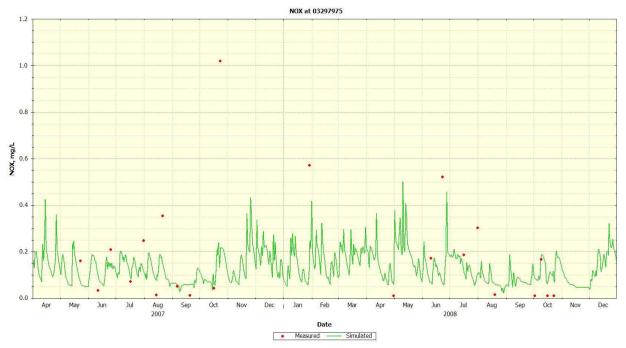


Figure A-142 Modeled vs. Observed  $NO_X$  (mg/L) at 03297975

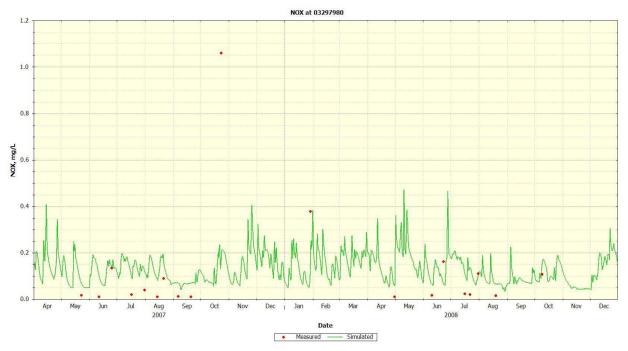


Figure A-143 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03297980

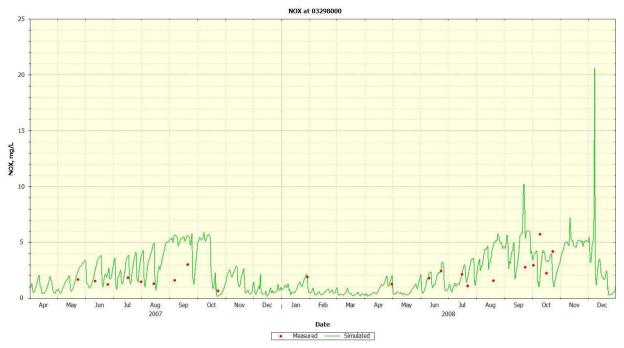


Figure A-144 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298000

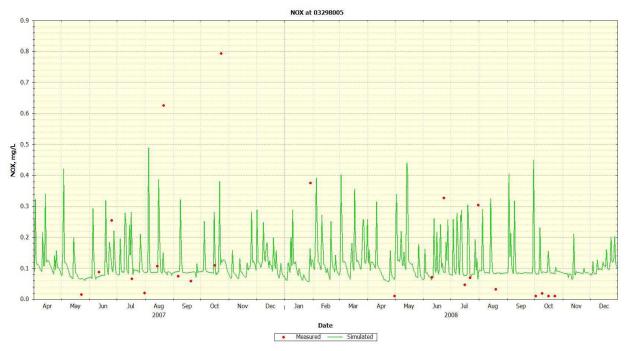


Figure A-145 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298005

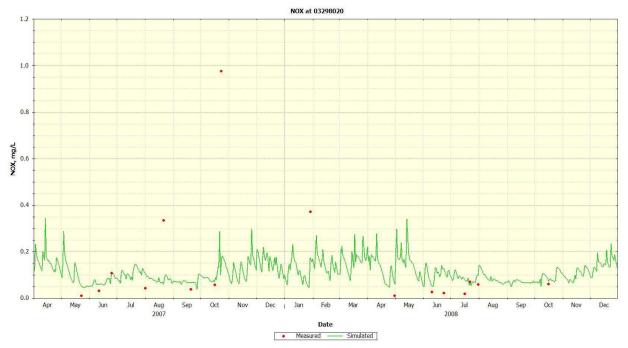


Figure A-146 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298020

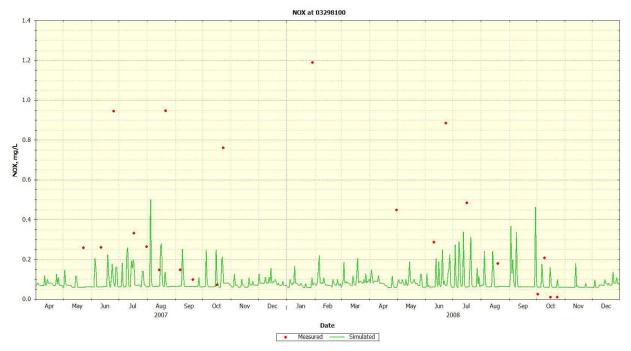


Figure A-147 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298100

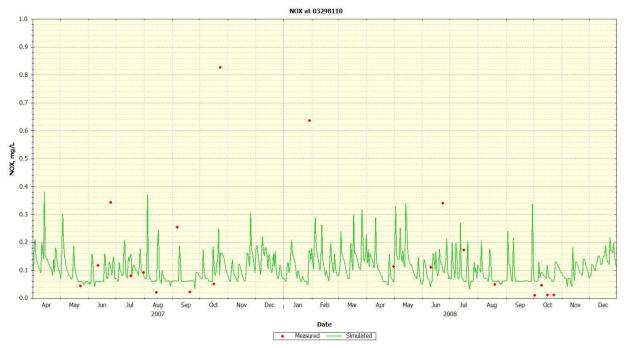


Figure A-148 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298110

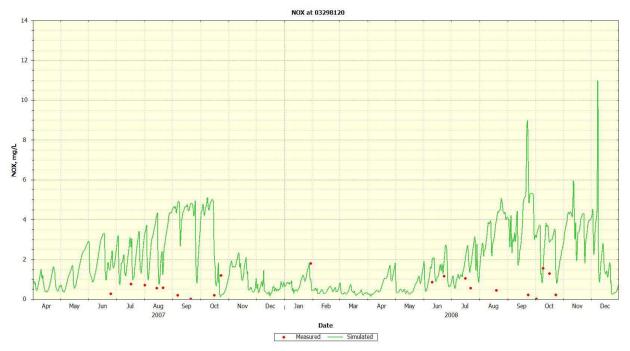


Figure A-149 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298120

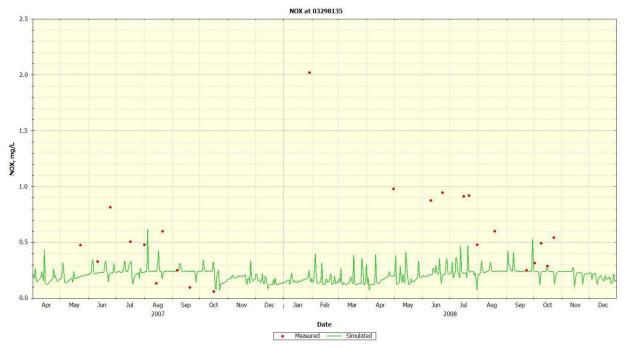


Figure A-150 Modeled vs. Observed  $NO_X$  (mg/L) at 03298135

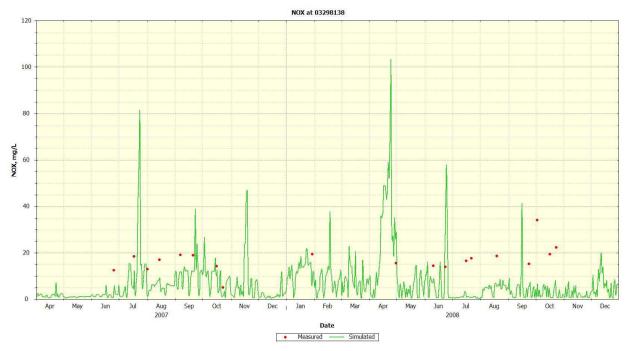


Figure A-151 Modeled vs. Observed  $NO_X$  (mg/L) at 03298138

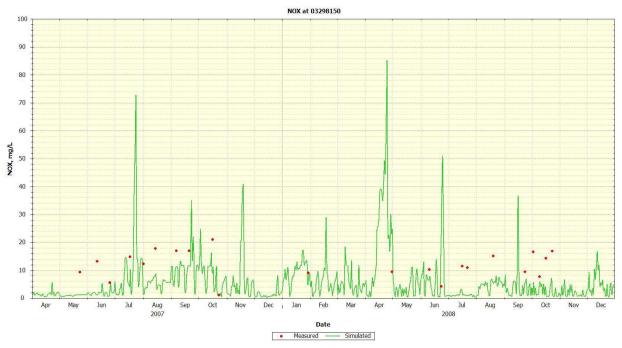


Figure A-152 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298150

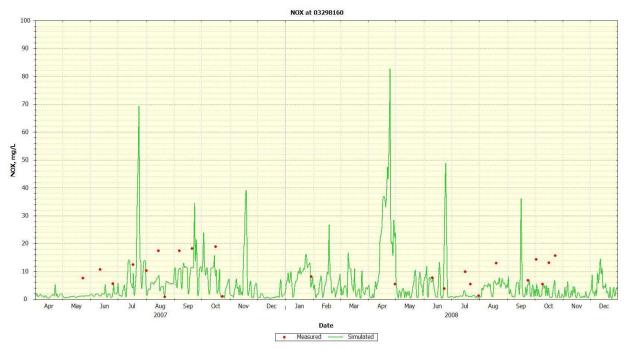


Figure A-153 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298160

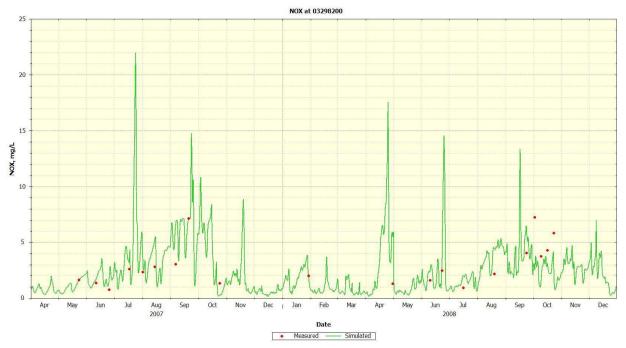


Figure A-154 Modeled vs. Observed  $NO_X$  (mg/L) at 03298200

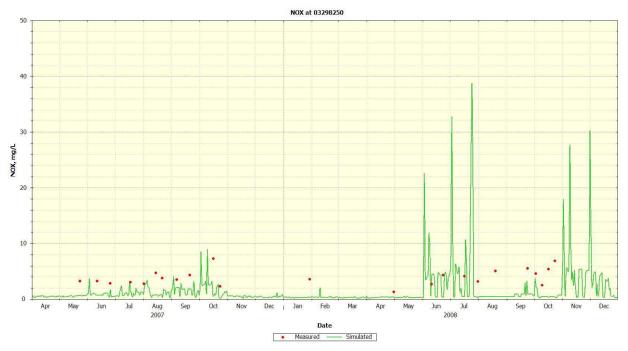


Figure A-155 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298250

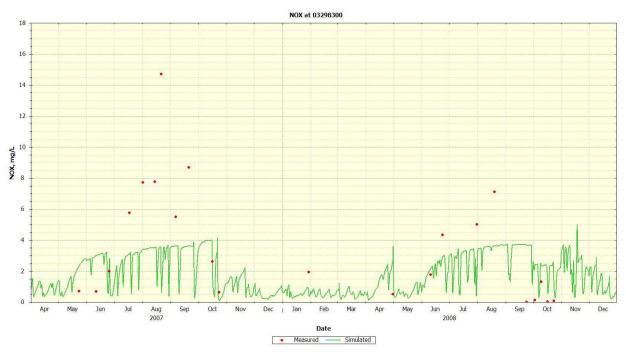


Figure A-156 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298300

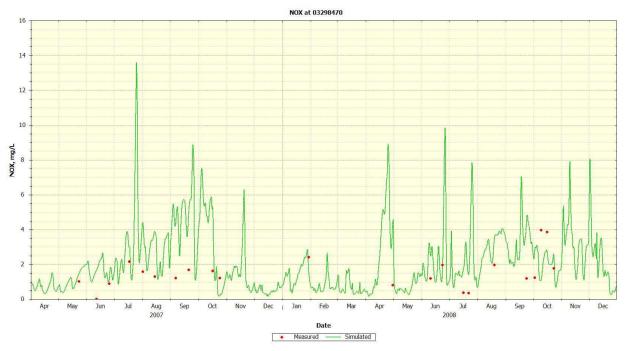


Figure A-157 Modeled vs. Observed NO<sub>X</sub> (mg/L) at 03298470

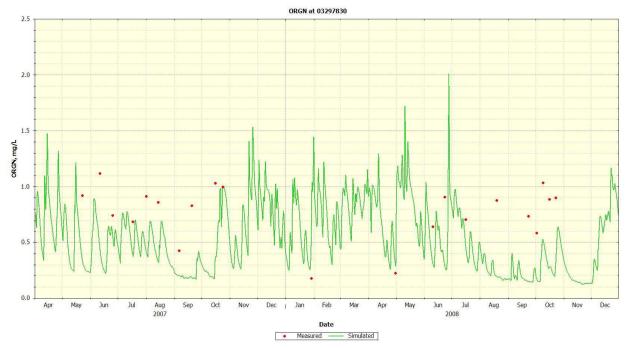


Figure A-158 Modeled vs. Observed ORGN (mg/L) at 03297830

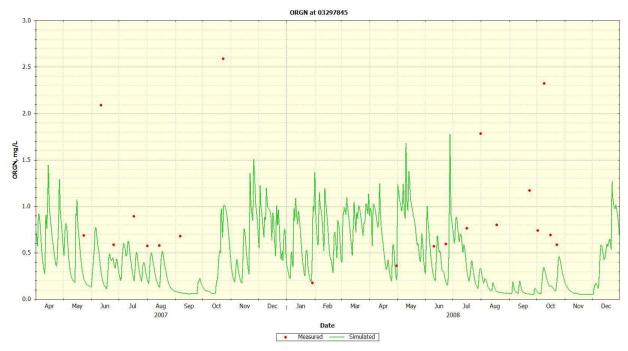


Figure A-159 Modeled vs. Observed ORGN (mg/L) at 03297845

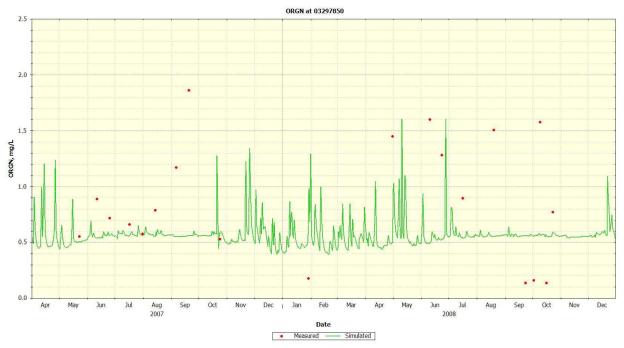


Figure A-160 Modeled vs. Observed ORGN (mg/L) at 03297850

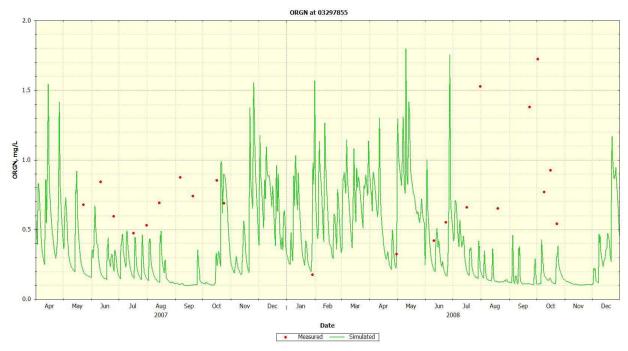


Figure A-161 Modeled vs. Observed ORGN (mg/L) at 03297855

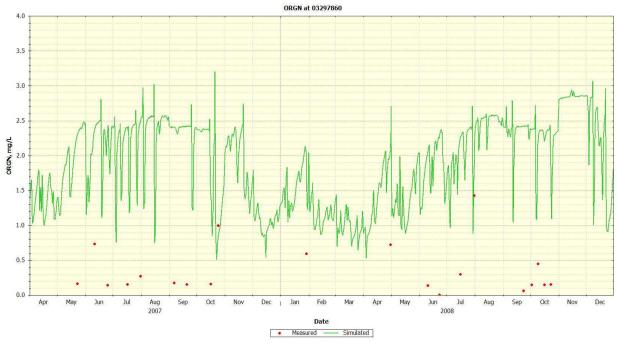


Figure A-162 Modeled vs. Observed ORGN (mg/L) at 03297860

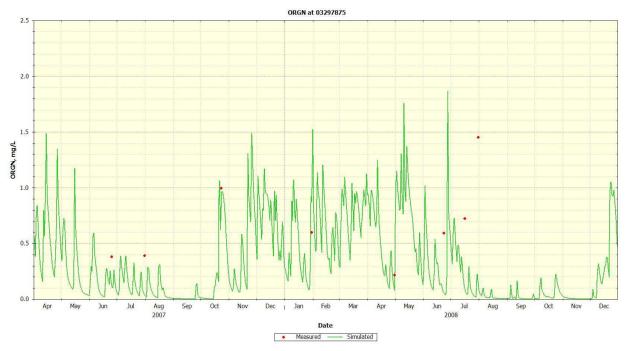


Figure A-163 Modeled vs. Observed ORGN (mg/L) at 03297875

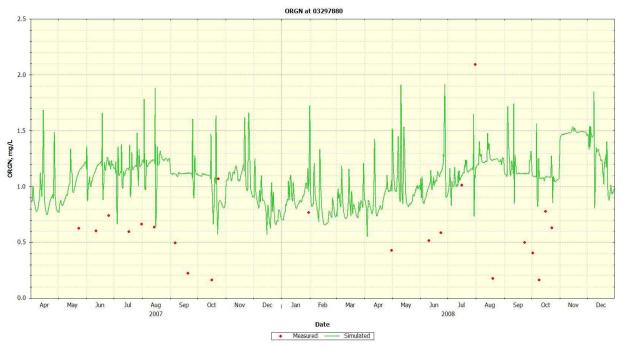


Figure A-164 Modeled vs. Observed ORGN (mg/L) at 03297880

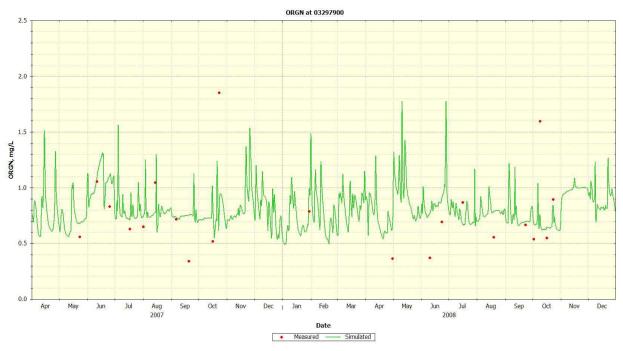


Figure A-165 Modeled vs. Observed ORGN (mg/L) at 03297900

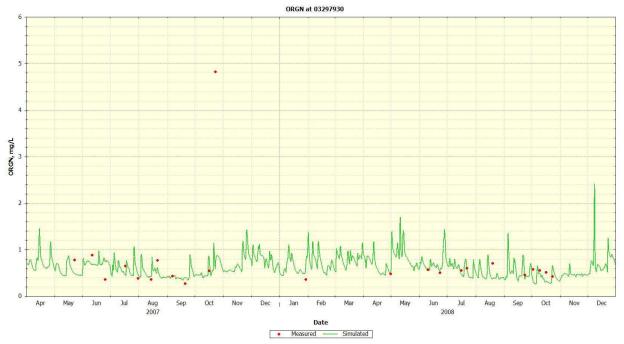


Figure A-166 Modeled vs. Observed ORGN (mg/L) at 03297930

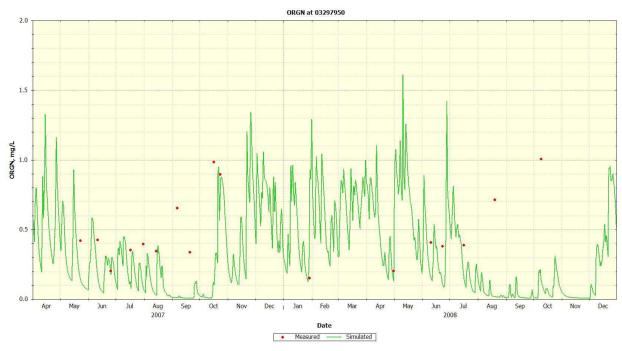


Figure A-167 Modeled vs. Observed ORGN (mg/L) at 03297950

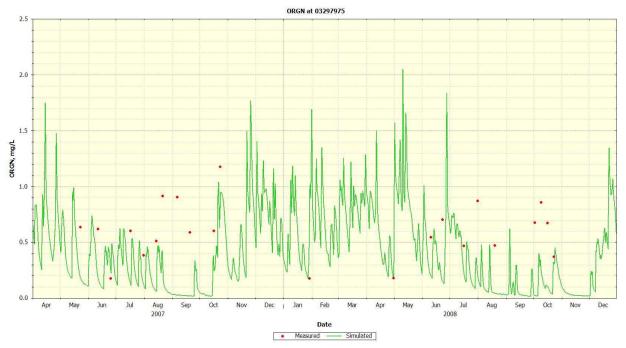


Figure A-168 Modeled vs. Observed ORGN (mg/L) at 03297975

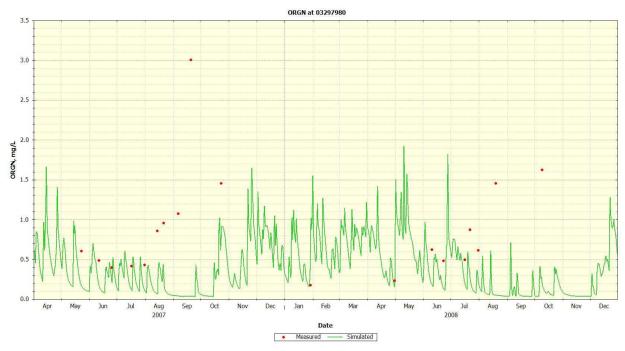


Figure A-169 Modeled vs. Observed ORGN (mg/L) at 03297980

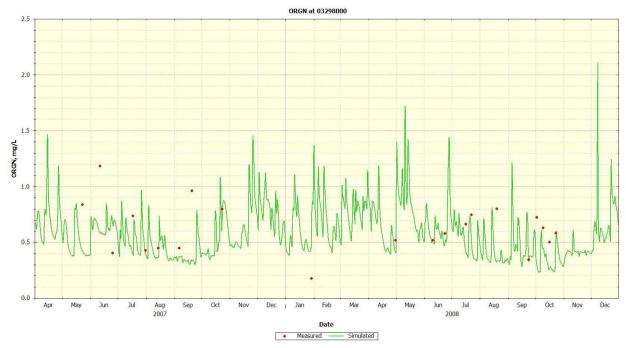


Figure A-170 Modeled vs. Observed ORGN (mg/L) at 03298000

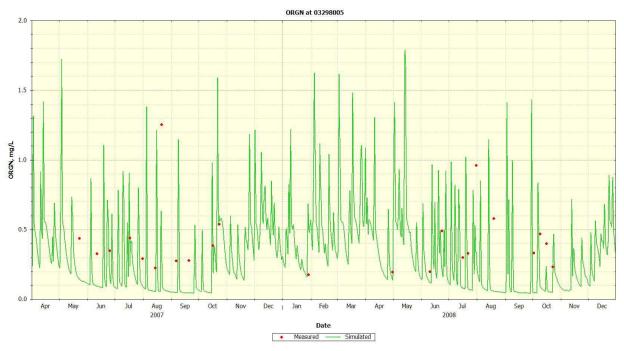


Figure A-171 Modeled vs. Observed ORGN (mg/L) at 03298005

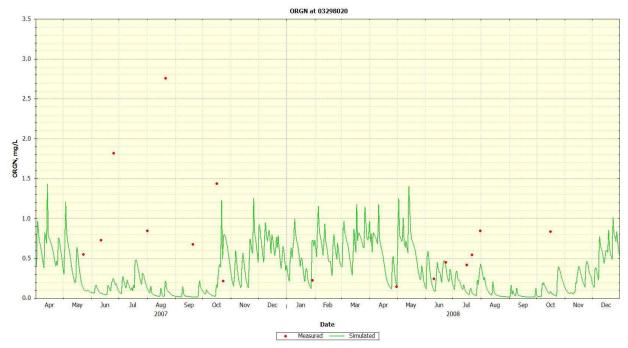


Figure A-172 Modeled vs. Observed ORGN (mg/L) at 03298020

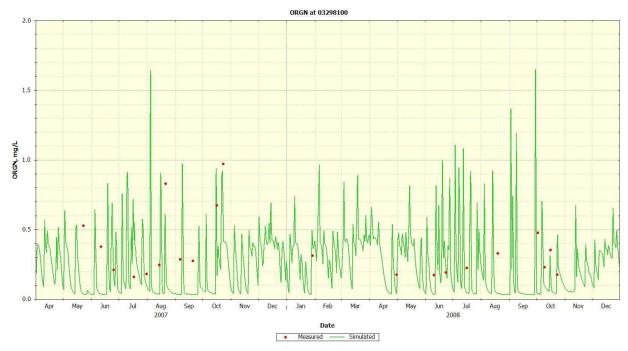


Figure A-173 Modeled vs. Observed ORGN (mg/L) at 03298100

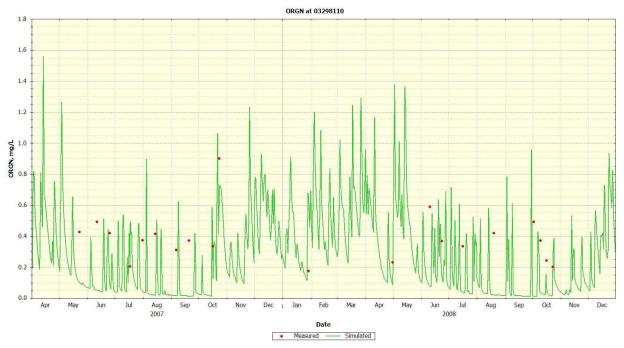


Figure A-174 Modeled vs. Observed ORGN (mg/L) at 03298110

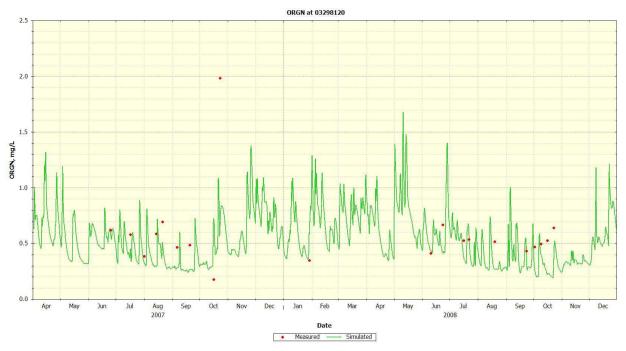


Figure A-175 Modeled vs. Observed ORGN (mg/L) at 03298120

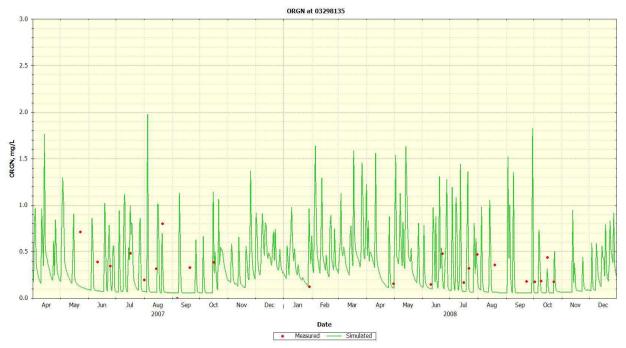


Figure A-176 Modeled vs. Observed ORGN (mg/L) at 03298135

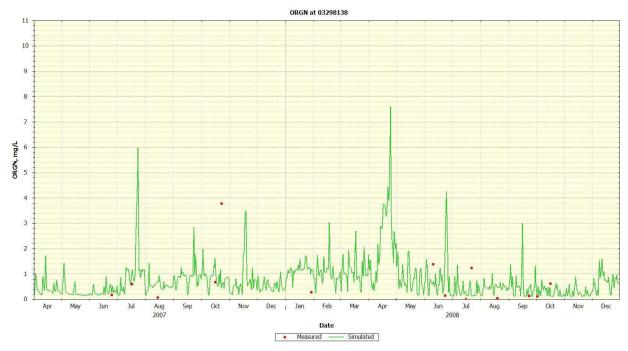


Figure A-177 Modeled vs. Observed ORGN (mg/L) at 03298138

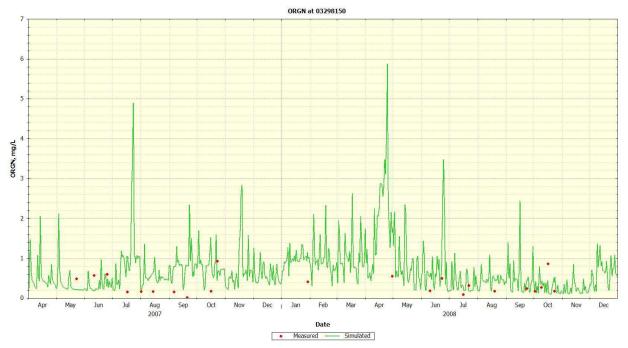


Figure A-178 Modeled vs. Observed ORGN (mg/L) at 03298150

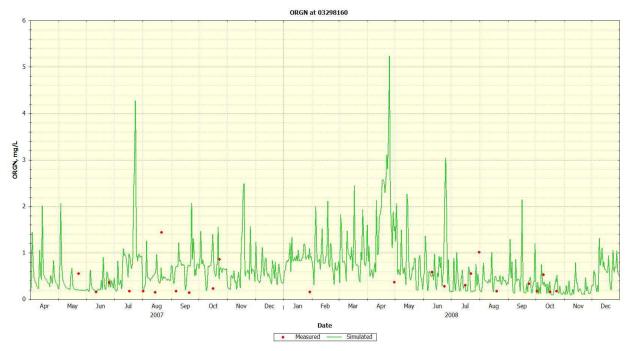


Figure A-179 Modeled vs. Observed ORGN (mg/L) at 03298160

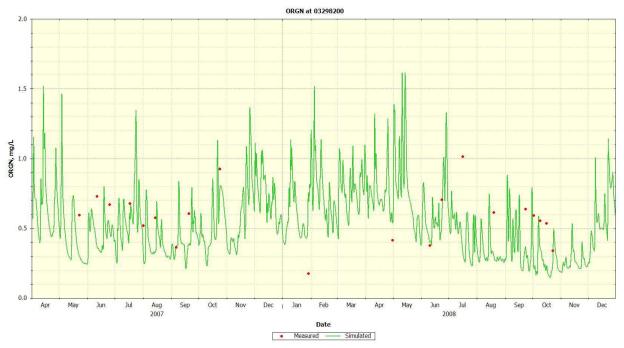


Figure A-180 Modeled vs. Observed ORGN (mg/L) at 03298200

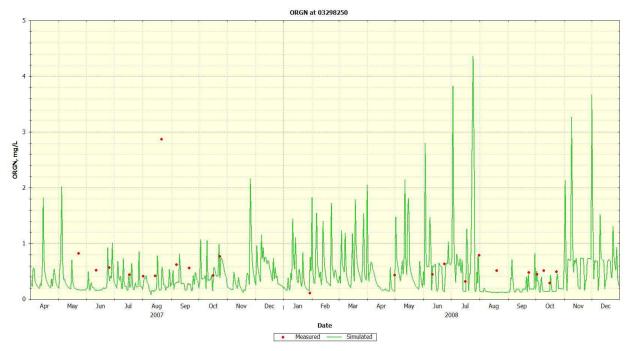


Figure A-181 Modeled vs. Observed ORGN (mg/L) at 03298250

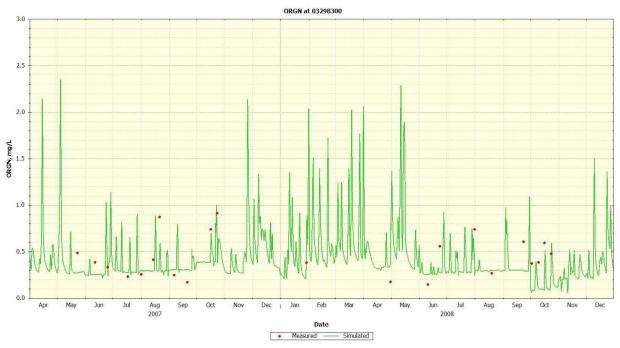


Figure A-182 Modeled vs. Observed ORGN (mg/L) at 03298300

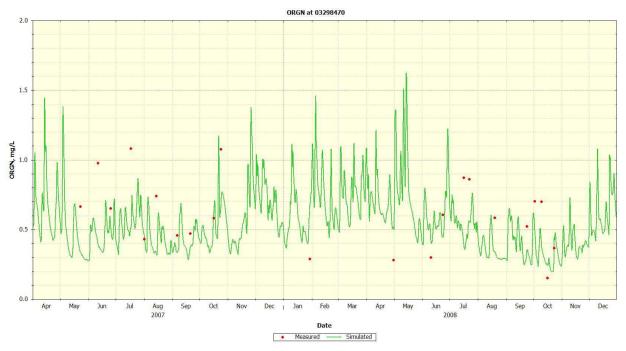


Figure A-183 Modeled vs. Observed ORGN (mg/L) at 03298470

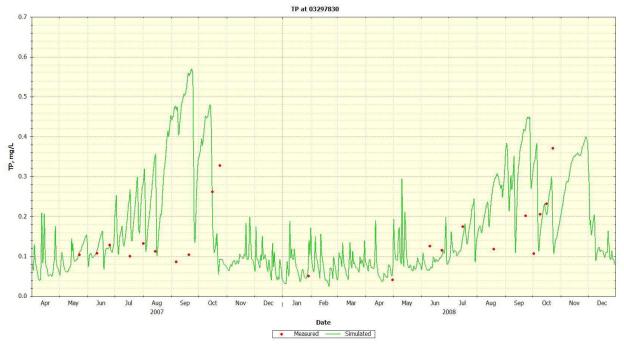


Figure A-184 Modeled vs. Observed TP (mg/L) at 03297830

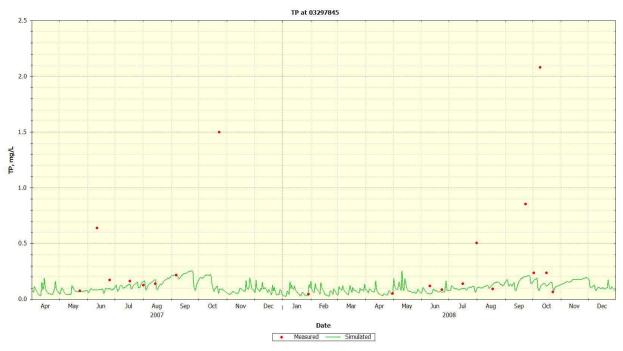


Figure A-185 Modeled vs. Observed TP (mg/L) at 03297845

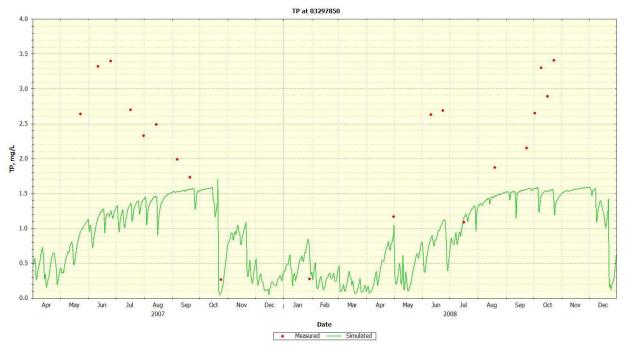


Figure A-186 Modeled vs. Observed TP (mg/L) at 03297850

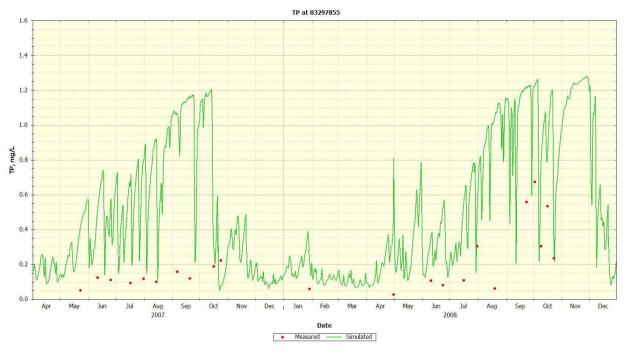


Figure A-187 Modeled vs. Observed TP (mg/L) at 03297855

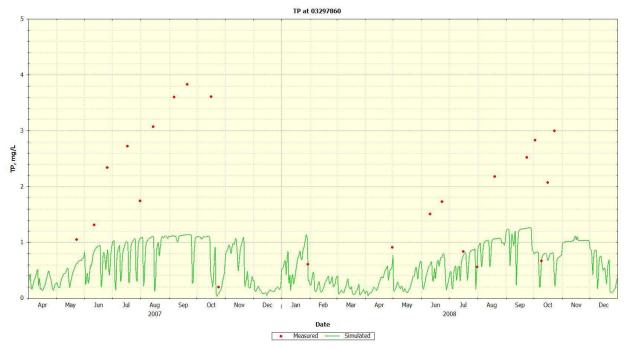


Figure A-188 Modeled vs. Observed TP (mg/L) at 03297860

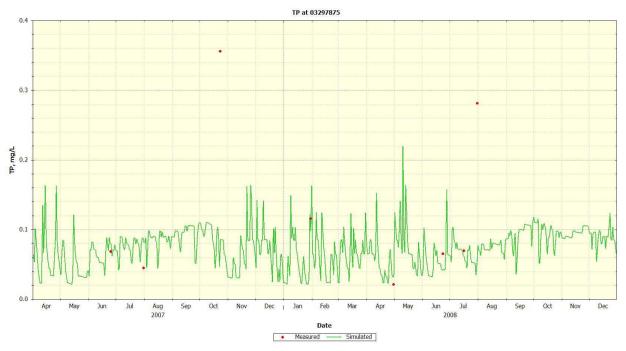


Figure A-189 Modeled vs. Observed TP (mg/L) at 03297875

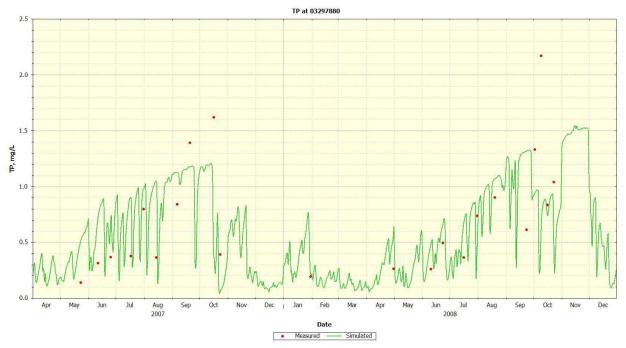


Figure A-190 Modeled vs. Observed TP (mg/L) at 03297880

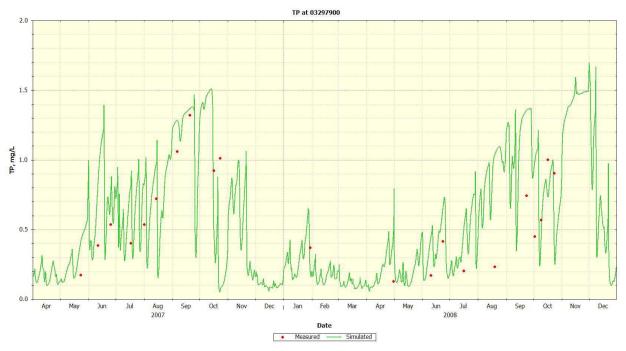


Figure A-191 Modeled vs. Observed TP (mg/L) at 03297900

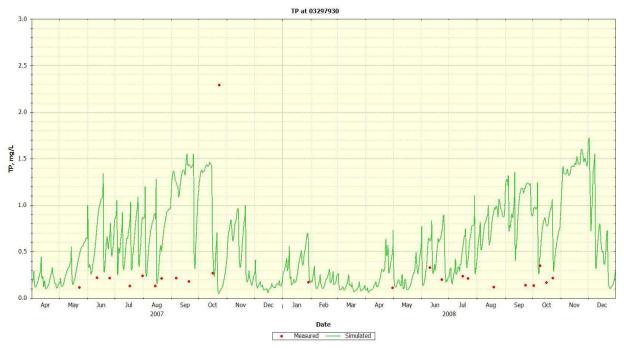


Figure A-192 Modeled vs. Observed TP (mg/L) at 03297930

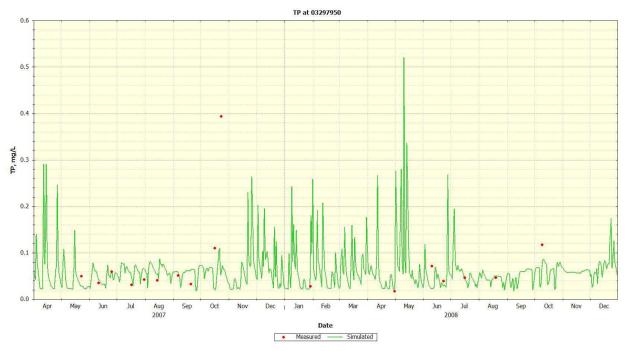


Figure A-193 Modeled vs. Observed TP (mg/L) at 03297950

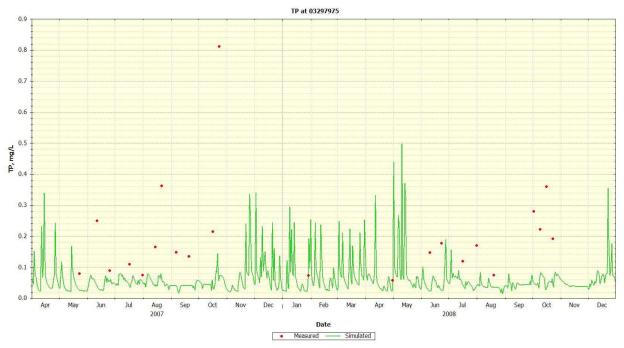


Figure A-194 Modeled vs. Observed TP (mg/L) at 03297975

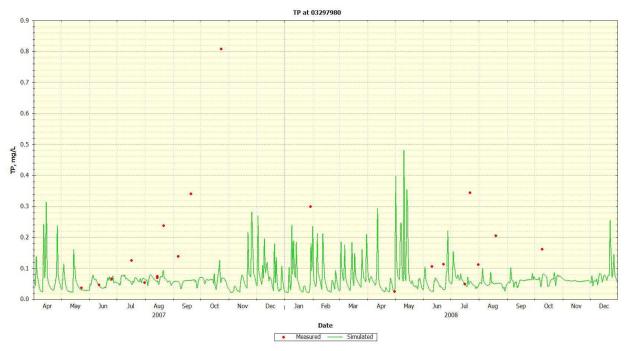


Figure A-195 Modeled vs. Observed TP (mg/L) at 03297980

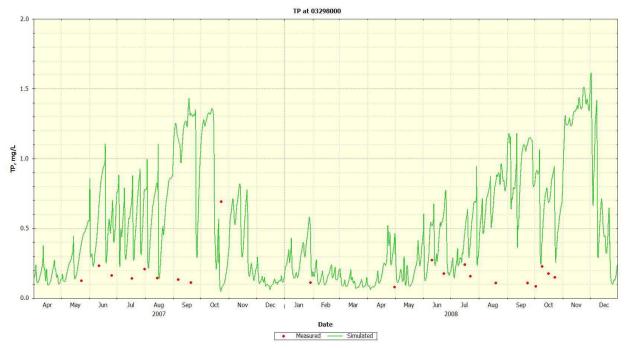


Figure A-196 Modeled vs. Observed TP (mg/L) at 03298000

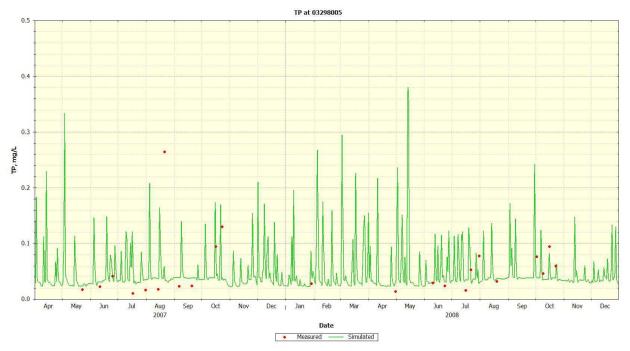


Figure A-197 Modeled vs. Observed TP (mg/L) at 03298005

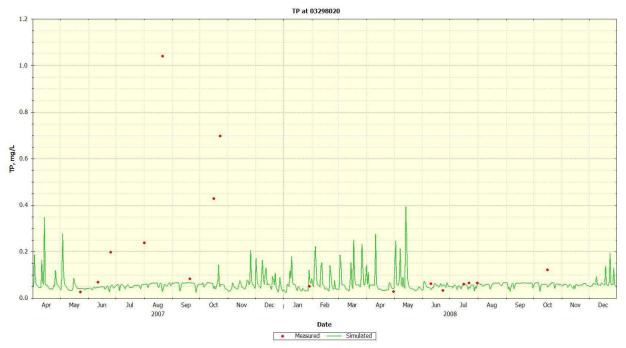


Figure A-198 Modeled vs. Observed TP (mg/L) at 03298020

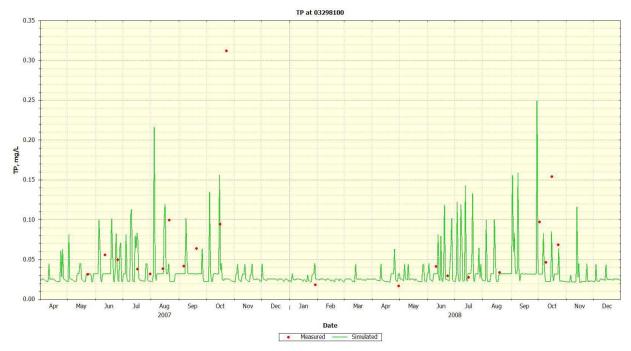


Figure A-199 Modeled vs. Observed TP (mg/L) at 03298100

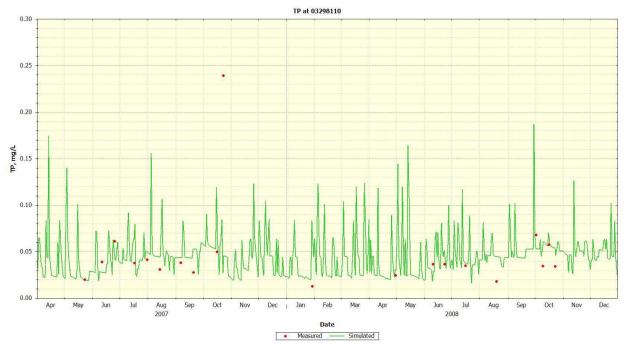


Figure A-200 Modeled vs. Observed TP (mg/L) at 03298110

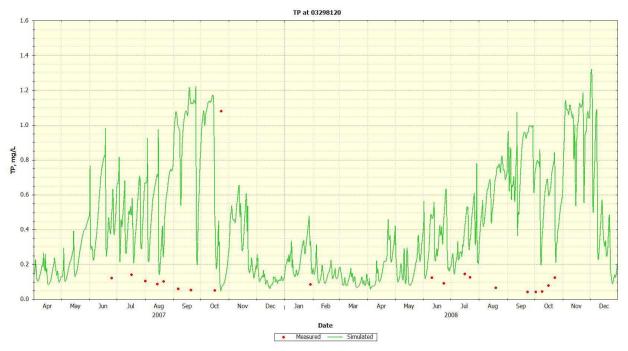


Figure A-201 Modeled vs. Observed TP (mg/L) at 03298120

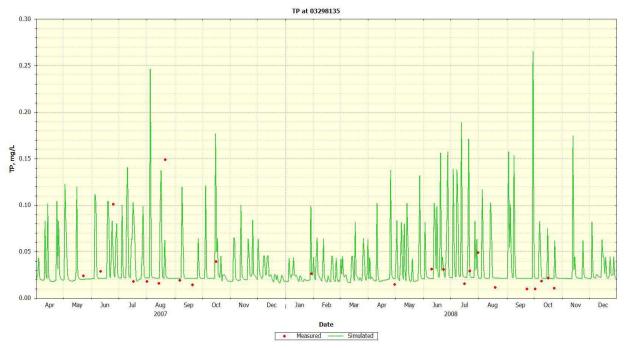


Figure A-202 Modeled vs. Observed TP (mg/L) at 03298135

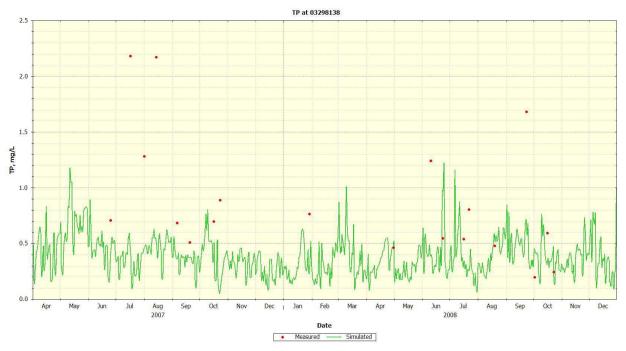


Figure A-203 Modeled vs. Observed TP (mg/L) at 03298138

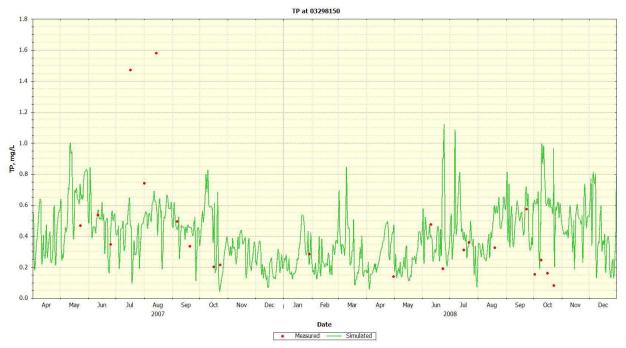


Figure A-204 Modeled vs. Observed TP (mg/L) at 03298150

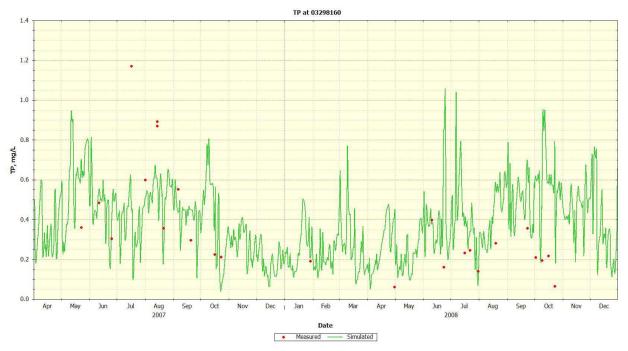


Figure A-205 Modeled vs. Observed TP (mg/L) at 03298160

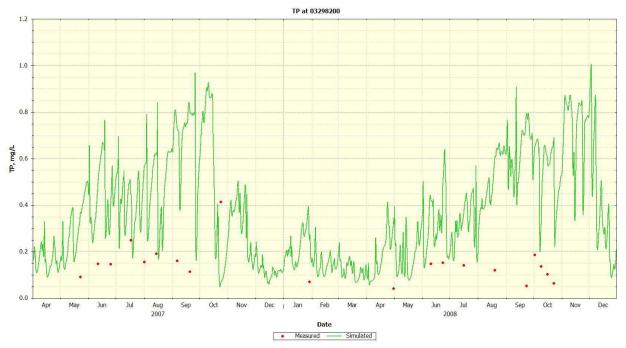


Figure A-206 Modeled vs. Observed TP (mg/L) at 03298200

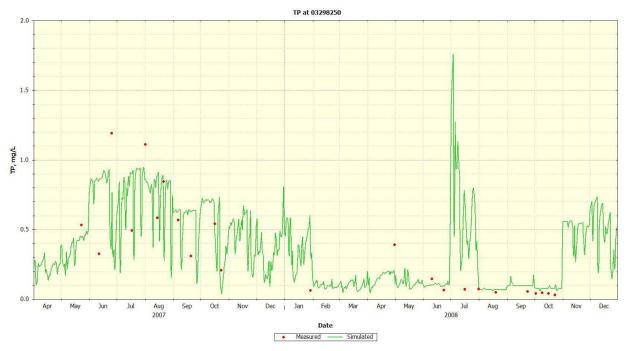


Figure A-207 Modeled vs. Observed TP (mg/L) at 03298250

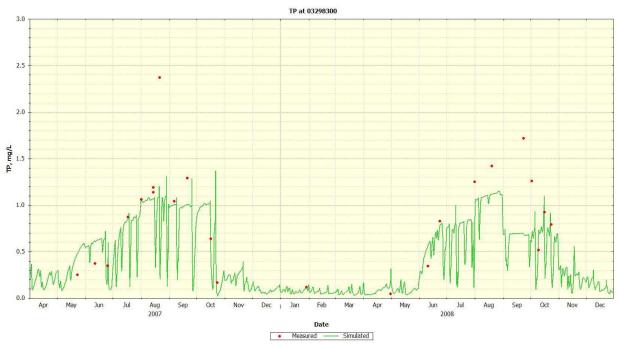


Figure A-208 Modeled vs. Observed TP (mg/L) at 03298300

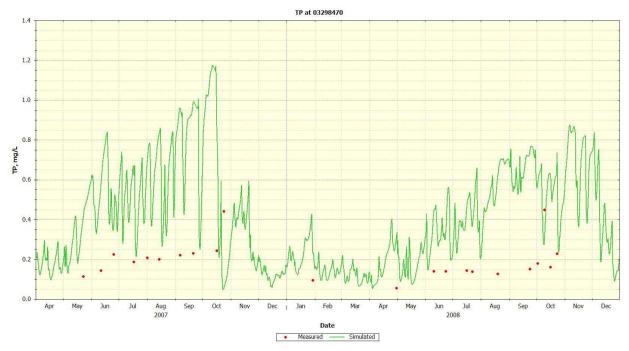


Figure A-209 Modeled vs. Observed TP (mg/L) at 03298470

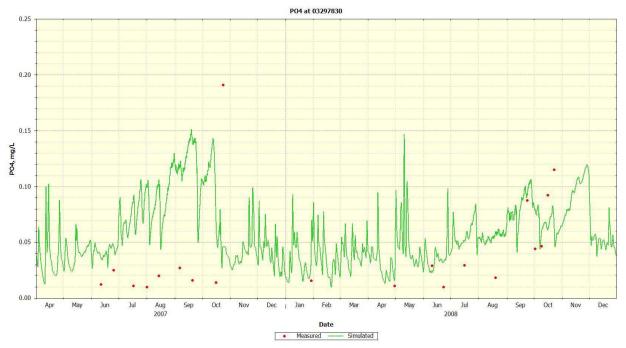


Figure A-210 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297830

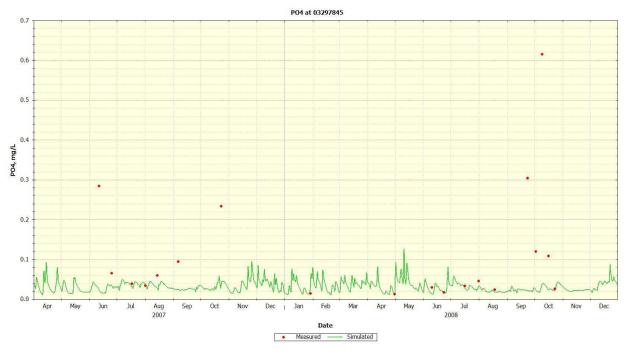


Figure A-211 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297845

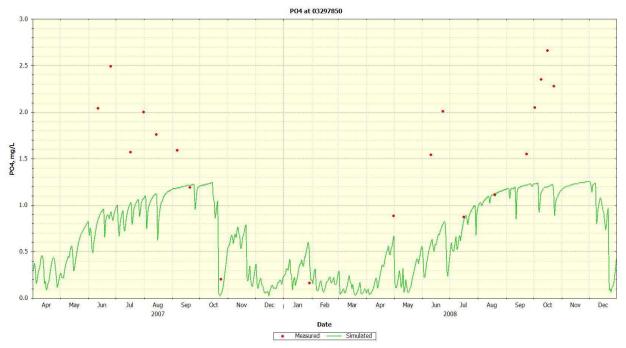


Figure A-212 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297850

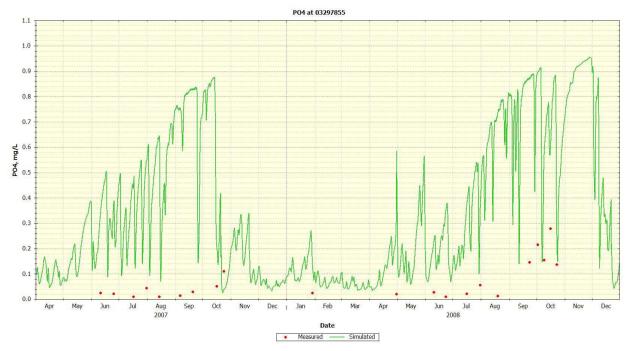


Figure A-213 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297855

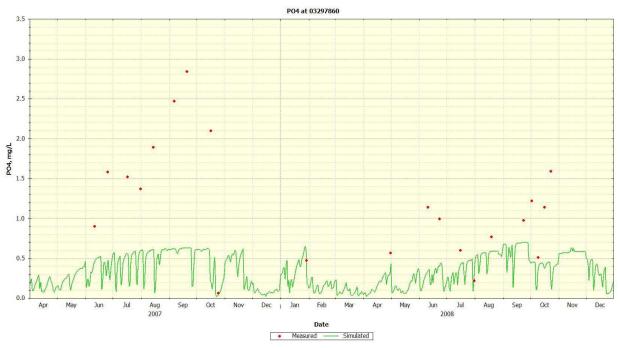


Figure A-214 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297860

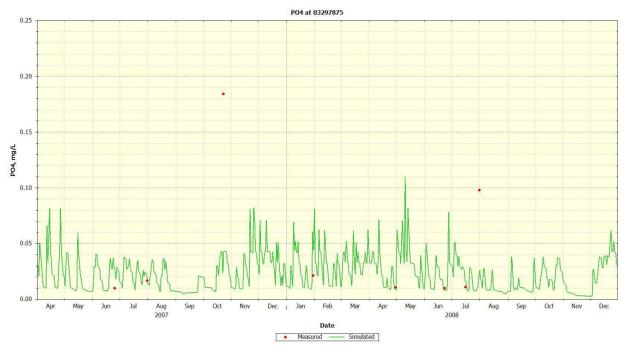


Figure A-215 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297875

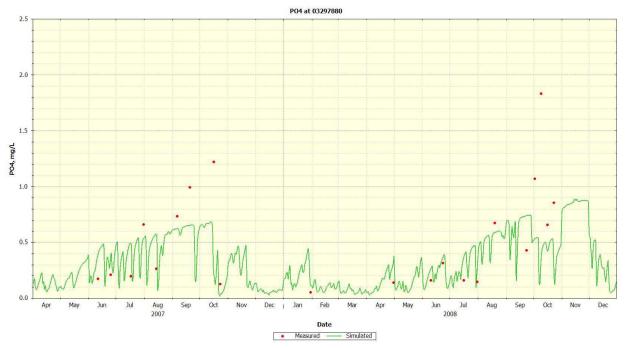


Figure A-216 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297880

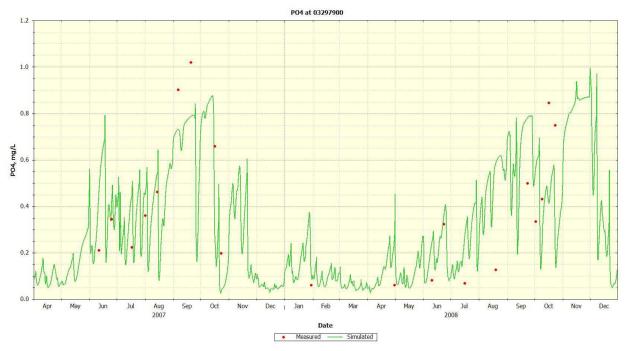


Figure A-217 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297900

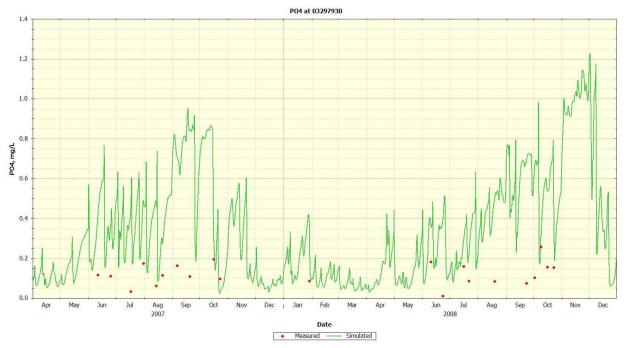


Figure A-218 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297930

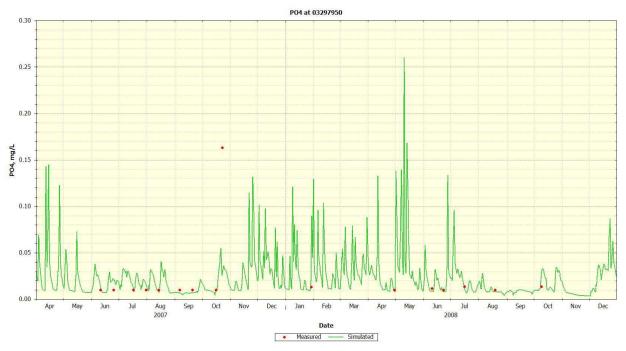


Figure A-219 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297950

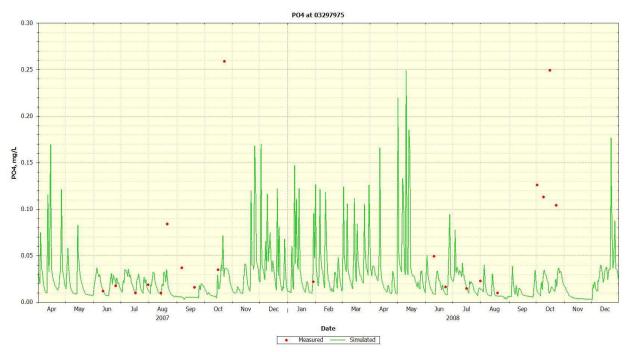


Figure A-220 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297975

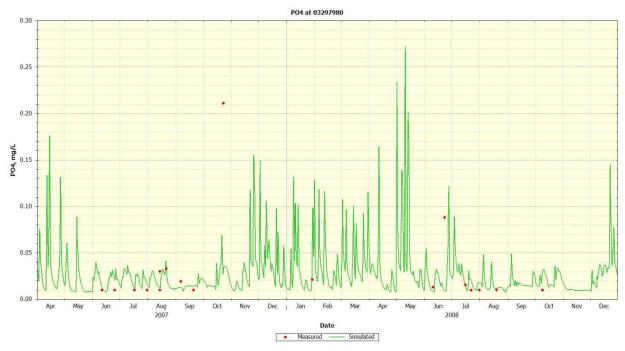


Figure A-221 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03297980

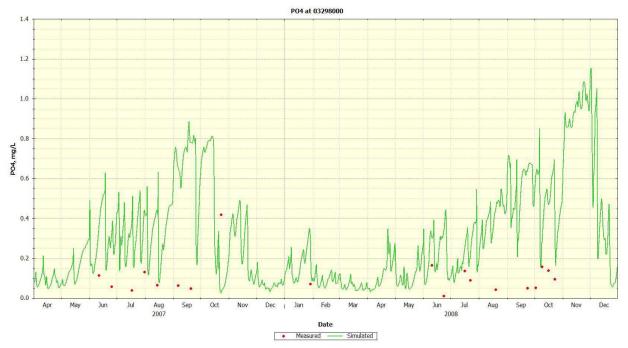


Figure A-222 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298000

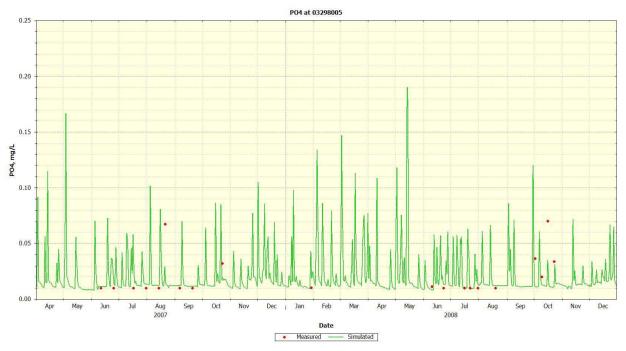


Figure A-223 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298005

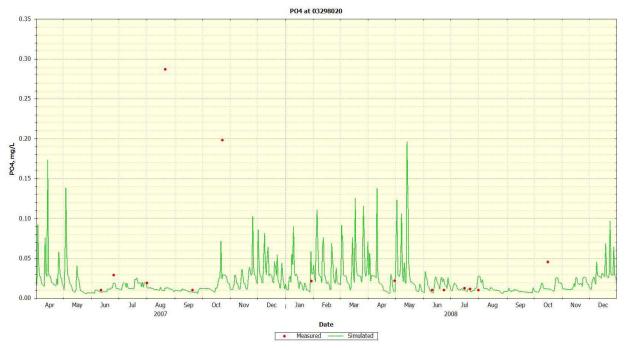


Figure A-224 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298020

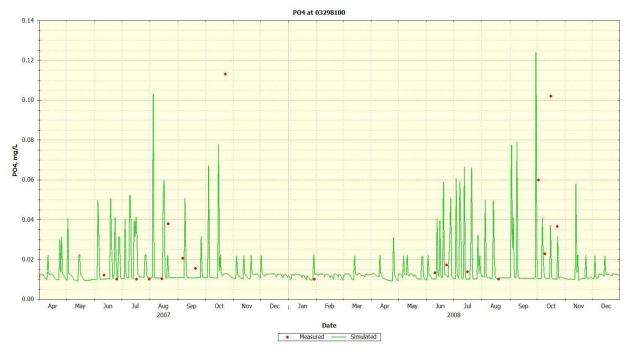


Figure A-225 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298100

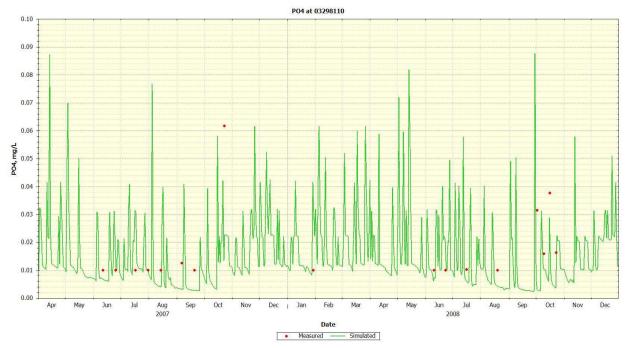


Figure A-226 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298110

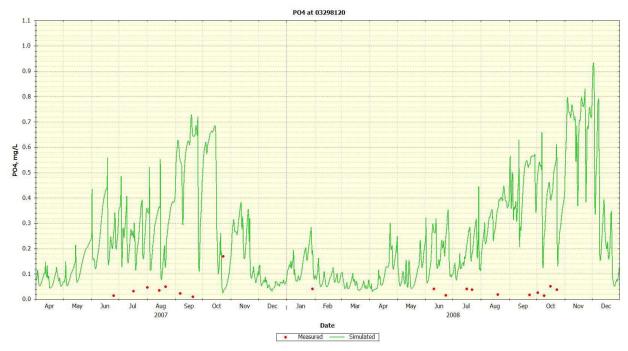


Figure A-227 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298120

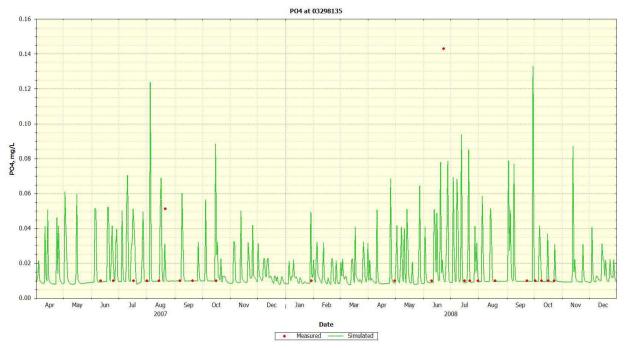


Figure A-228 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298135

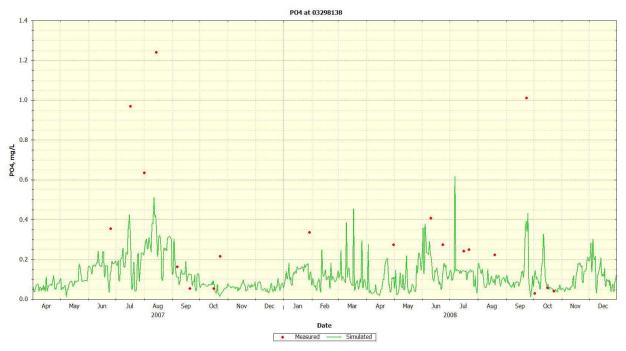


Figure A-229 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298138

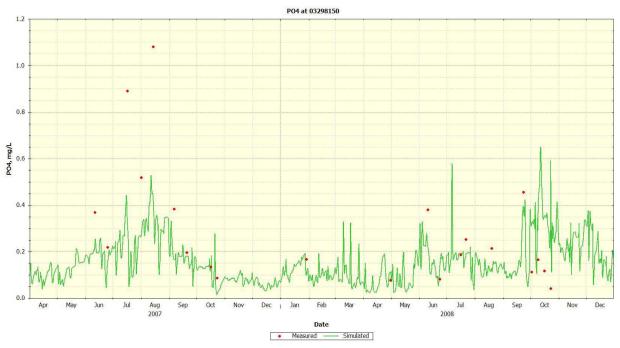


Figure A-230 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298150

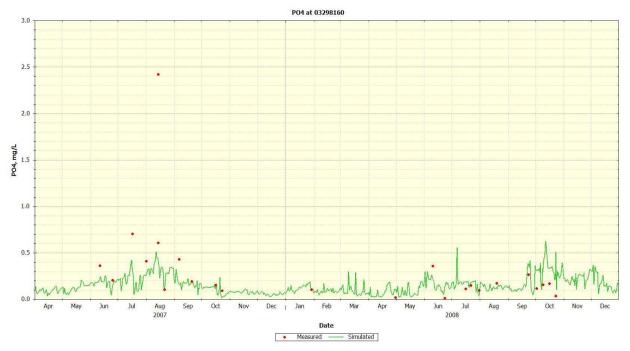


Figure A-231 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298160

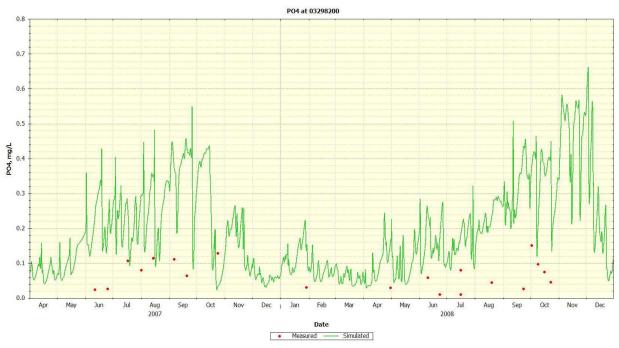


Figure A-232 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298200

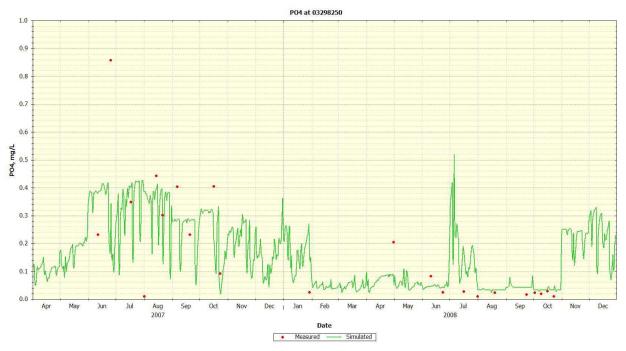


Figure A-233 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298250

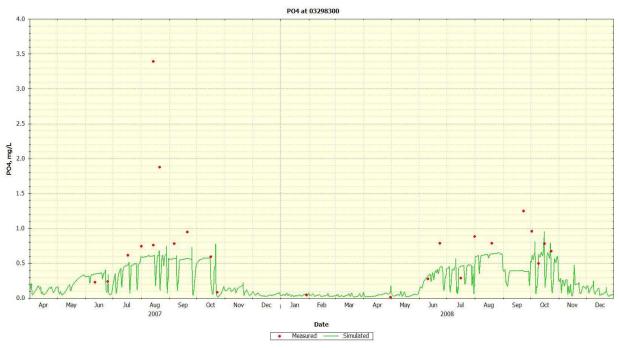


Figure A-234 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298300

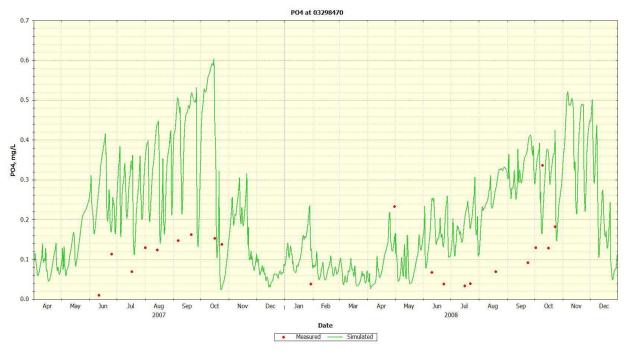


Figure A-235 Modeled vs. Observed PO<sub>4</sub> (mg/L) at 03298470

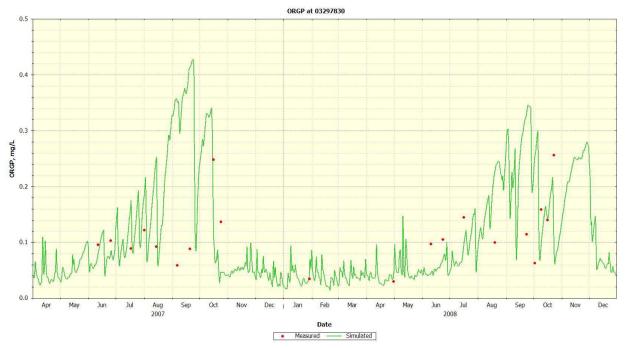


Figure A-236 Modeled vs. Observed ORGP (mg/L) at 03297830

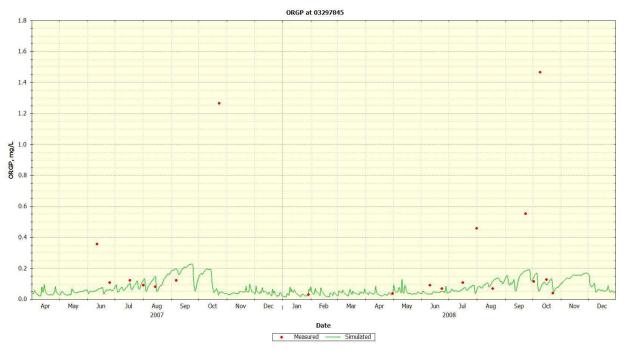


Figure A-237 Modeled vs. Observed ORGP (mg/L) at 03297845

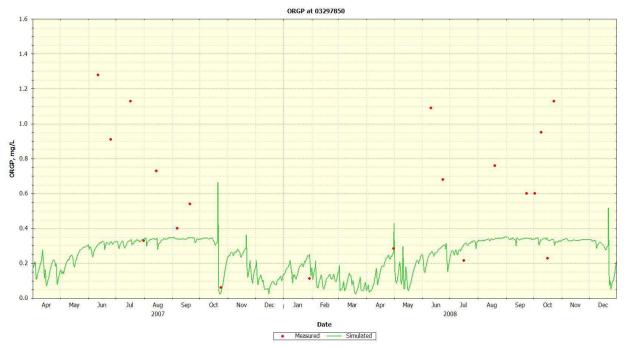


Figure A-238 Modeled vs. Observed ORGP (mg/L) at 03297850

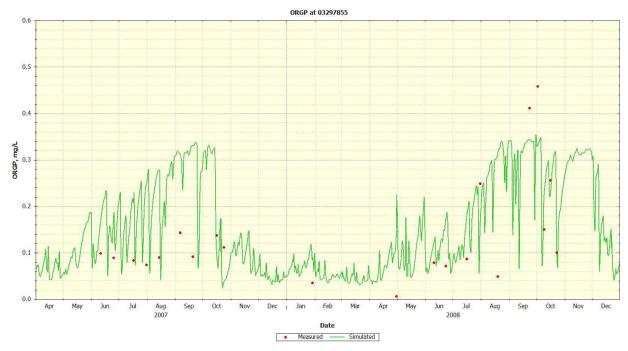


Figure A-239 Modeled vs. Observed ORGP (mg/L) at 03297855

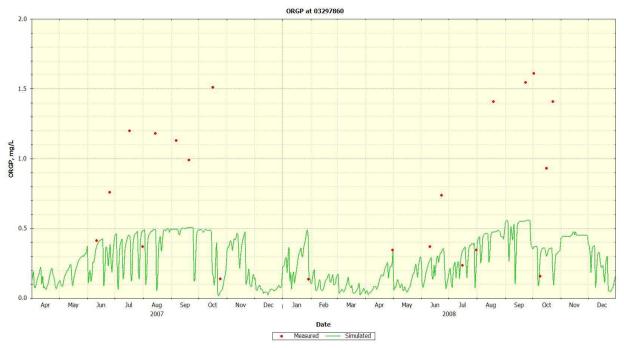


Figure A-240 Modeled vs. Observed ORGP (mg/L) at 03297860

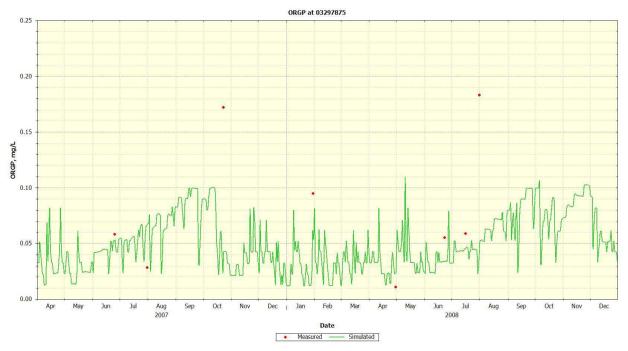


Figure A-241 Modeled vs. Observed ORGP (mg/L) at 03297875

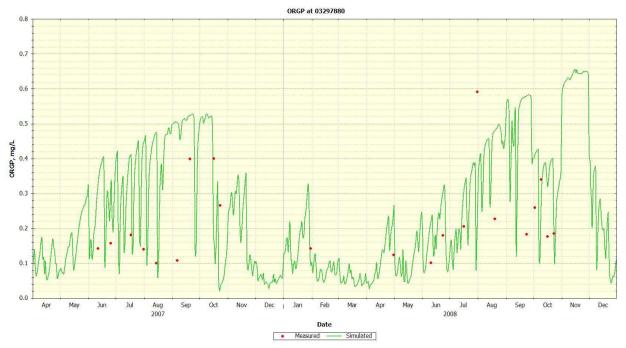


Figure A-242 Modeled vs. Observed ORGP (mg/L) at 03297880

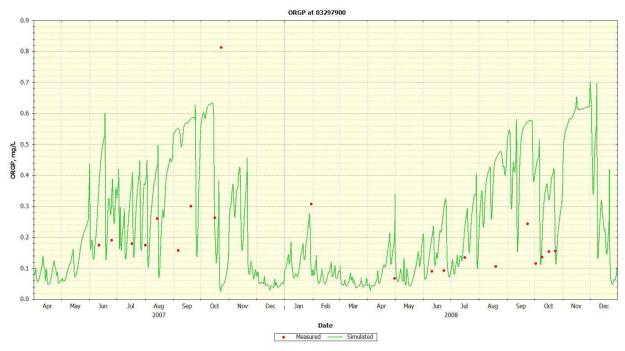


Figure A-243 Modeled vs. Observed ORGP (mg/L) at 03297900

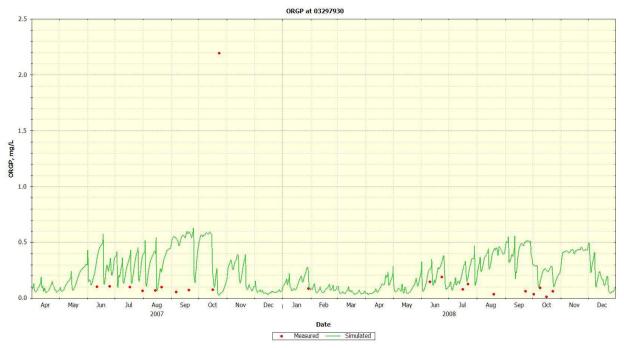


Figure A-244 Modeled vs. Observed ORGP (mg/L) at 03297930

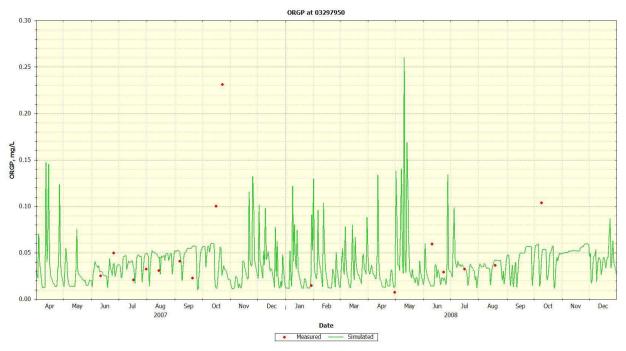


Figure A-245 Modeled vs. Observed ORGP (mg/L) at 03297950

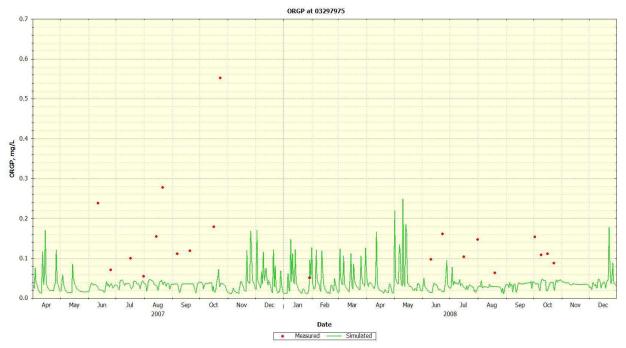


Figure A-246 Modeled vs. Observed ORGP (mg/L) at 03297975

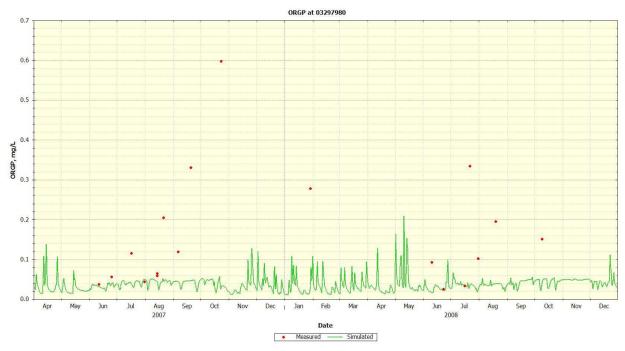


Figure A-247 Modeled vs. Observed ORGP (mg/L) at 03297980

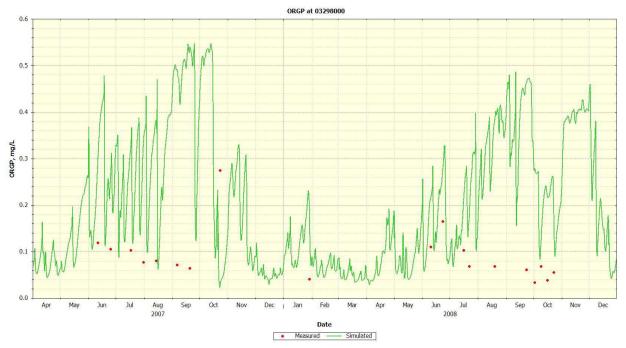


Figure A-248 Modeled vs. Observed ORGP (mg/L) at 03298000

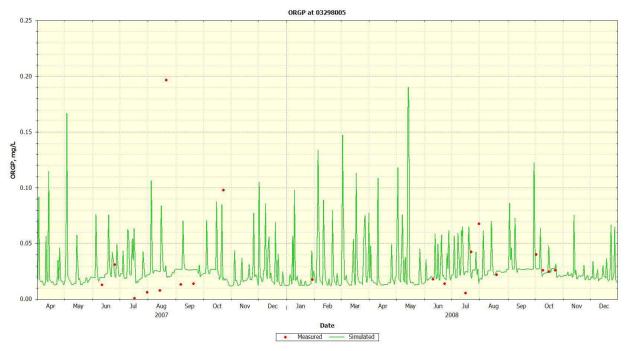


Figure A-249 Modeled vs. Observed ORGP (mg/L) at 03298005

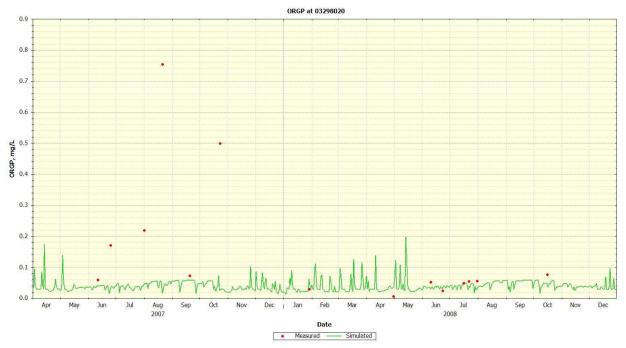


Figure A-250 Modeled vs. Observed ORGP (mg/L) at 03298020

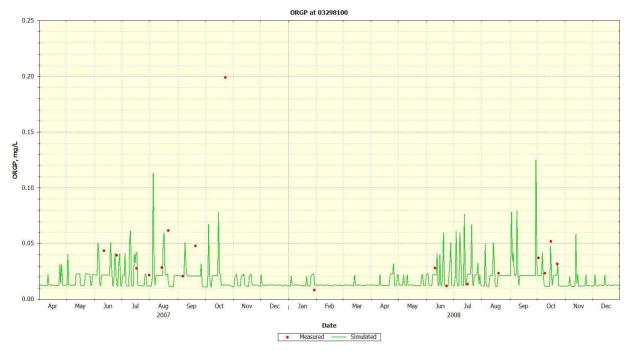


Figure A-251 Modeled vs. Observed ORGP (mg/L) at 03298100

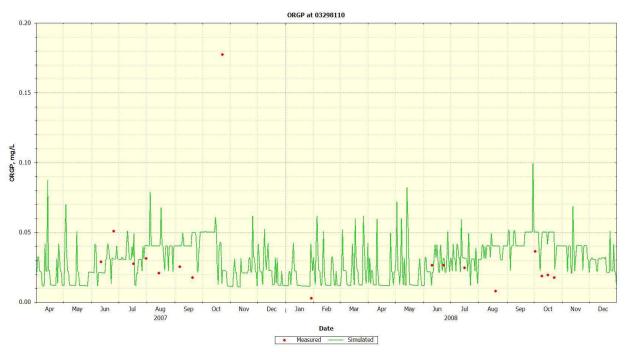


Figure A-252 Modeled vs. Observed ORGP (mg/L) at 03298110

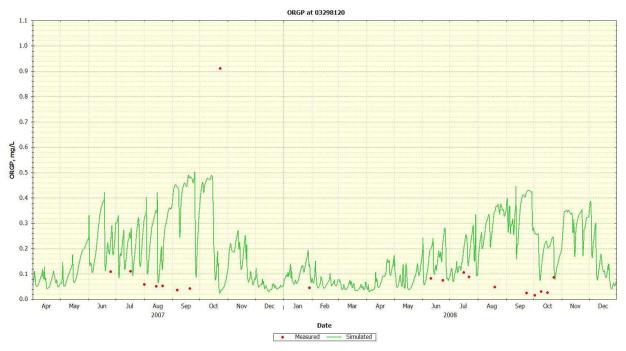


Figure A-253 Modeled vs. Observed ORGP (mg/L) at 03298120

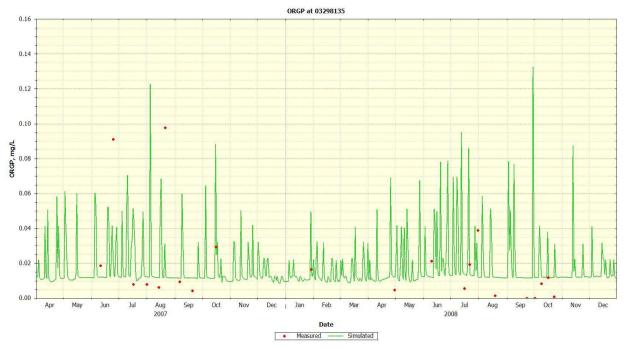


Figure A-254 Modeled vs. Observed ORGP (mg/L) at 03298135

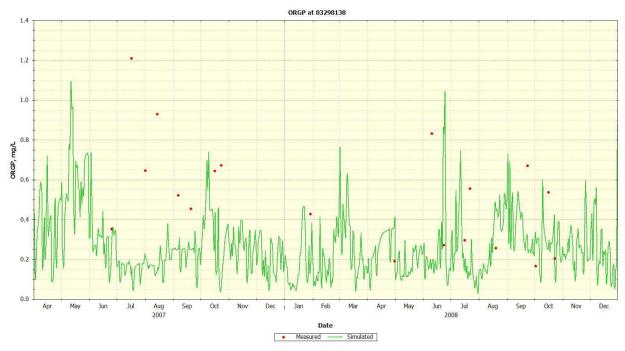


Figure A-255 Modeled vs. Observed ORGP (mg/L) at 03298138

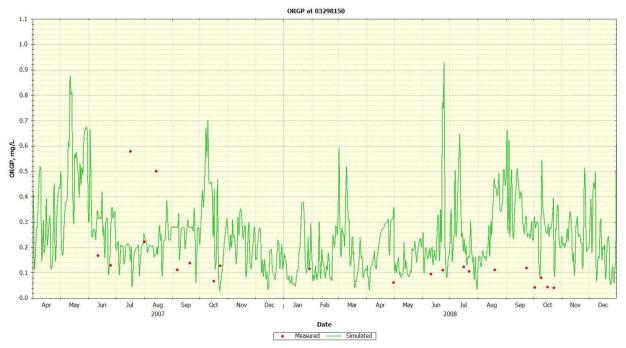


Figure A-256 Modeled vs. Observed ORGP (mg/L) at 03298150

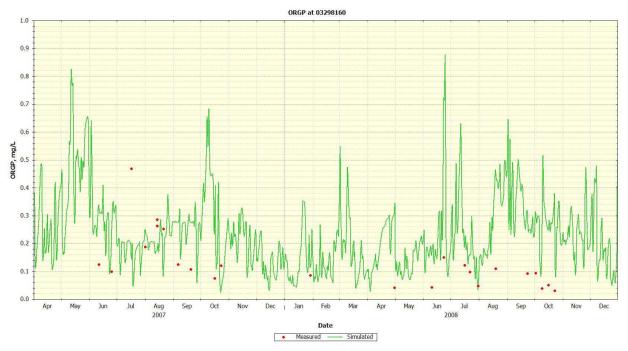


Figure A-257 Modeled vs. Observed ORGP (mg/L) at 03298160

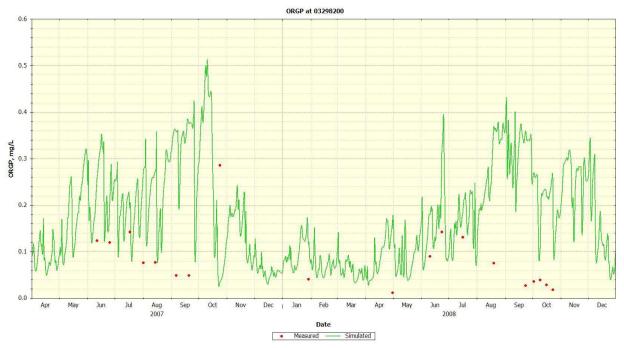


Figure A-258 Modeled vs. Observed ORGP (mg/L) at 03298200

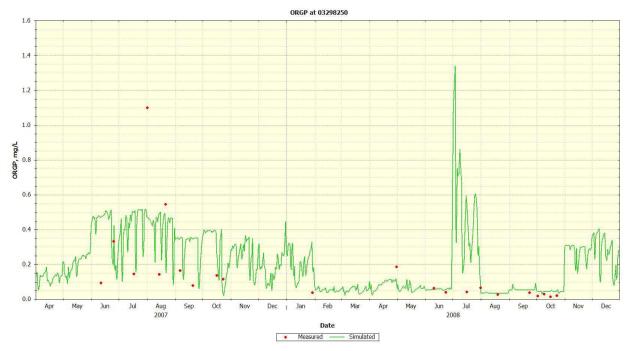


Figure A-259 Modeled vs. Observed ORGP (mg/L) at 03298250

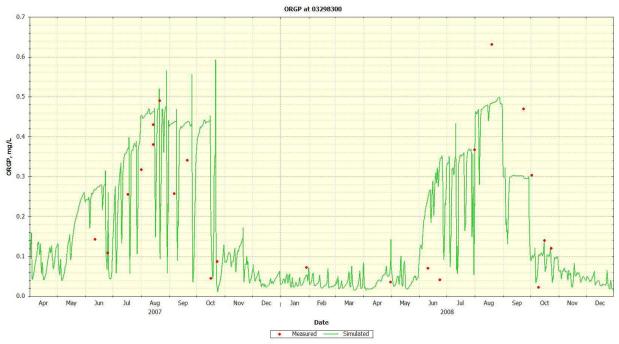


Figure A-260 Modeled vs. Observed ORGP (mg/L) at 03298300

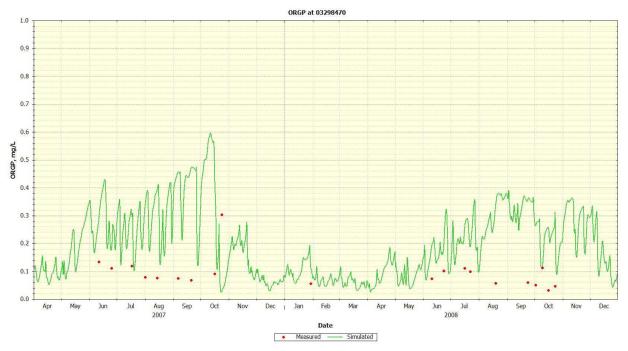


Figure A-261 Modeled vs. Observed ORGP (mg/L) at 03298470

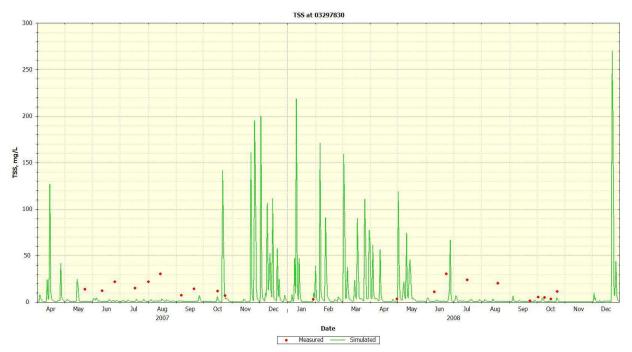


Figure A-262 Modeled vs. Observed TSS (mg/L) at 03297830

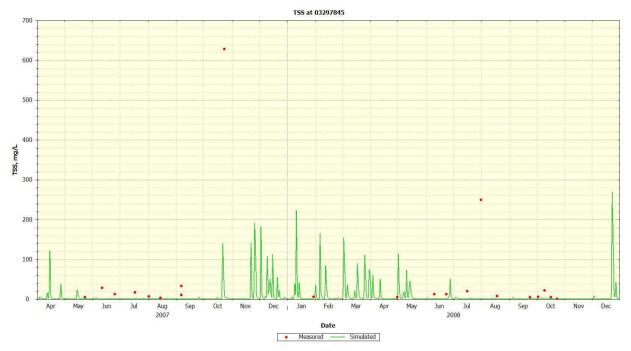


Figure A-263 Modeled vs. Observed TSS (mg/L) at 03297845

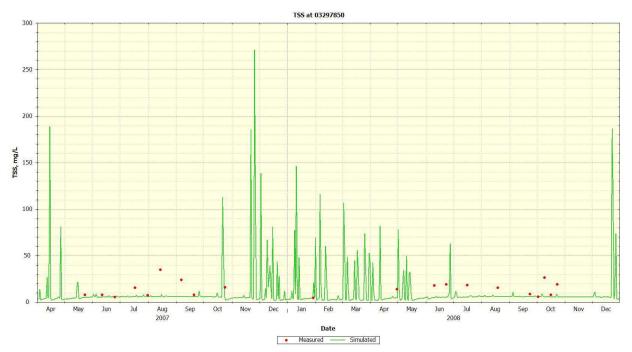


Figure A-264 Modeled vs. Observed TSS (mg/L) at 03297850

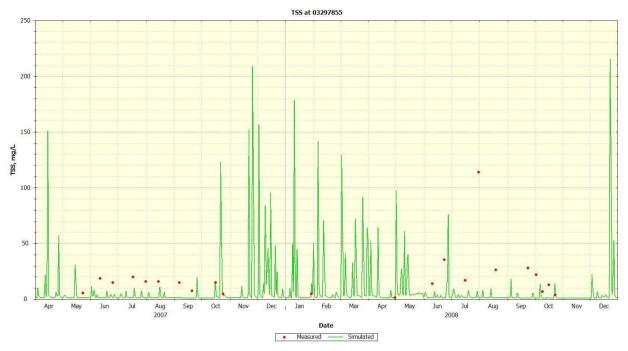


Figure A-265 Modeled vs. Observed TSS (mg/L) at 03297855

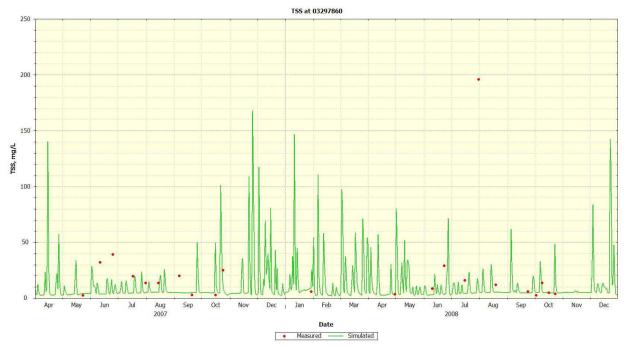


Figure A-266 Modeled vs. Observed TSS (mg/L) at 03297860

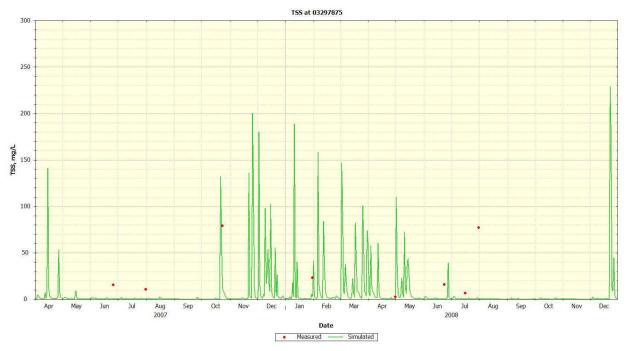


Figure A-267 Modeled vs. Observed TSS (mg/L) at 03297875

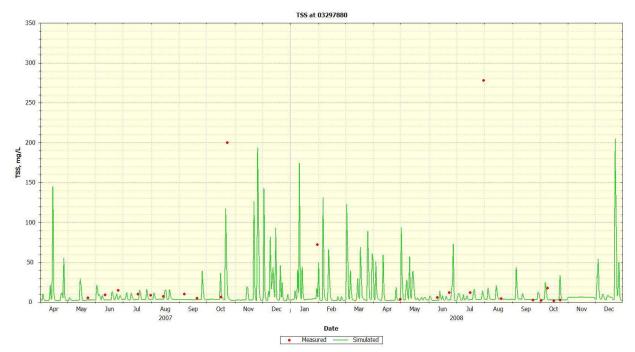


Figure A-268 Modeled vs. Observed TSS (mg/L) at 03297880

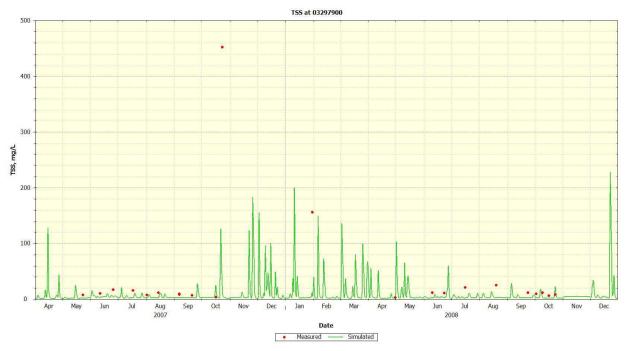


Figure A-269 Modeled vs. Observed TSS (mg/L) at 03297900

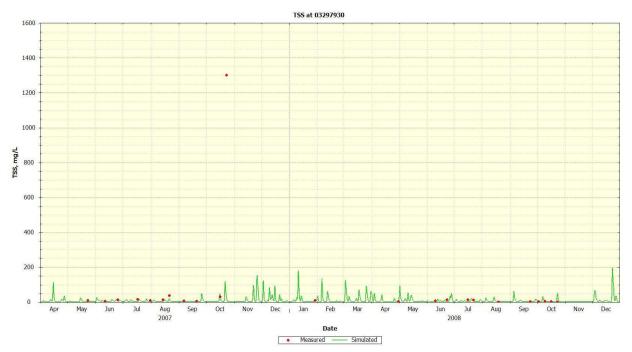


Figure A-270 Modeled vs. Observed TSS (mg/L) at 03297930

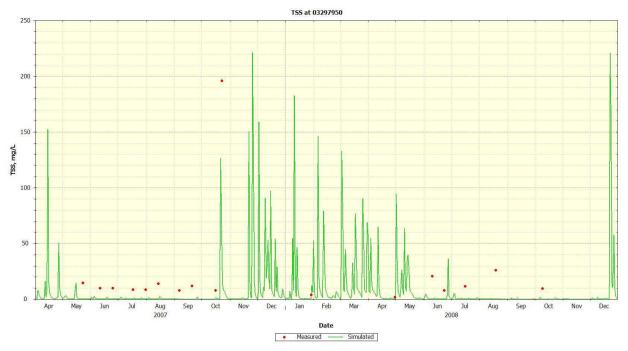


Figure A-271 Modeled vs. Observed TSS (mg/L) at 03297950

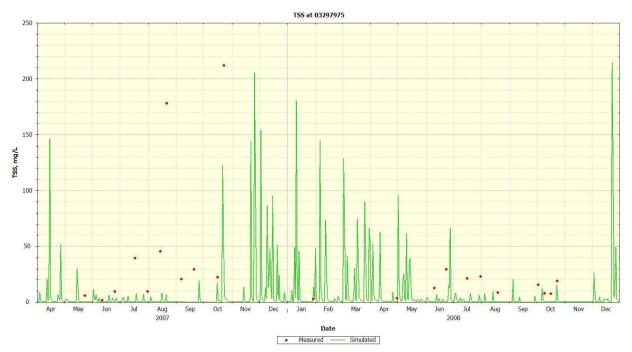


Figure A-272 Modeled vs. Observed TSS (mg/L) at 03297975

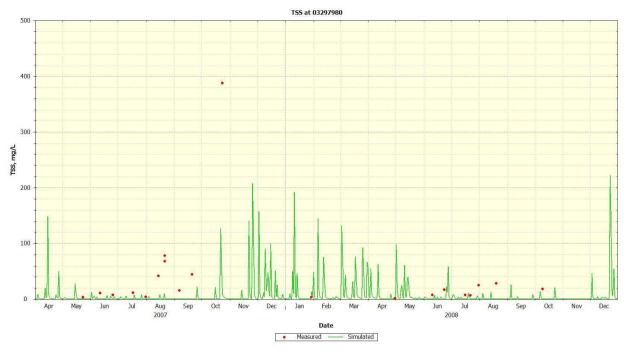


Figure A-273 Modeled vs. Observed TSS (mg/L) at 03297980

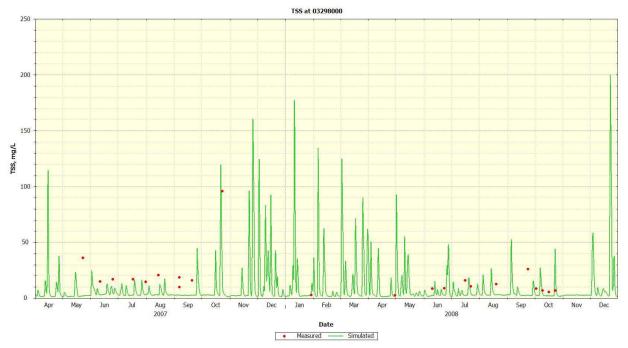


Figure A-274 Modeled vs. Observed TSS (mg/L) at 03298000

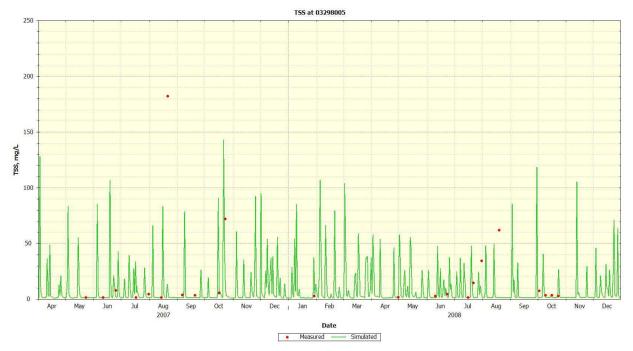


Figure A-275 Modeled vs. Observed TSS (mg/L) at 03298005

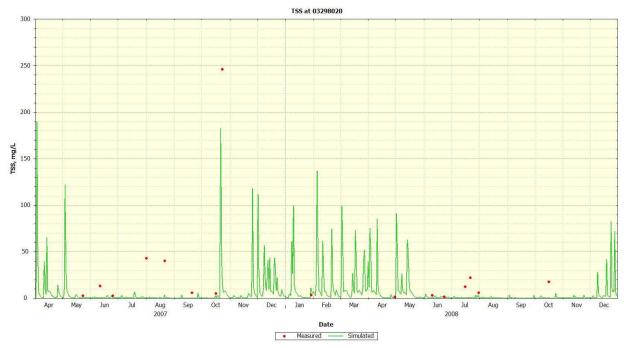


Figure A-276 Modeled vs. Observed TSS (mg/L) at 03298020

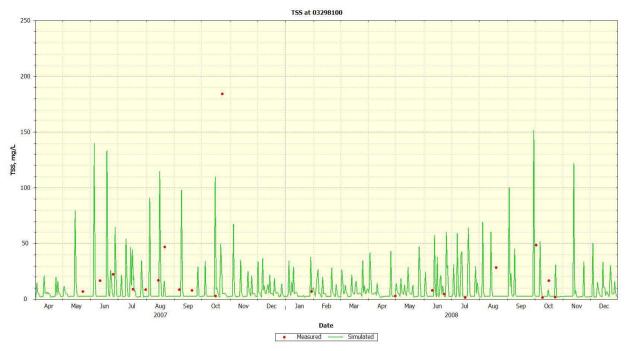


Figure A-277 Modeled vs. Observed TSS (mg/L) at 03298100

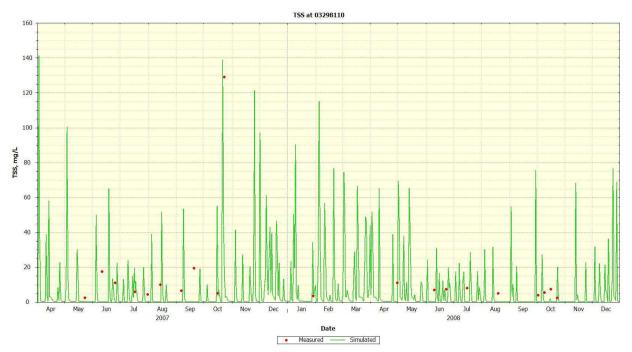


Figure A-278 Modeled vs. Observed TSS (mg/L) at 03298110

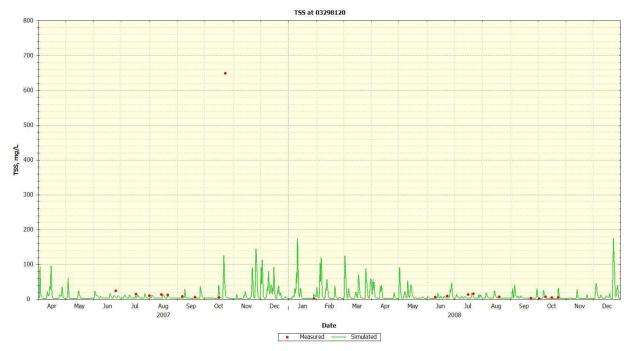


Figure A-279 Modeled vs. Observed TSS (mg/L) at 03298120

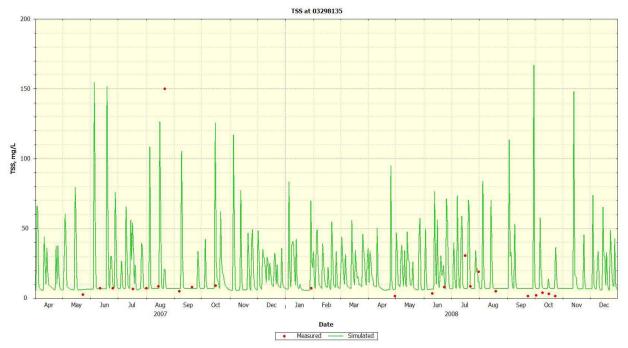


Figure A-280 Modeled vs. Observed TSS (mg/L) at 03298135

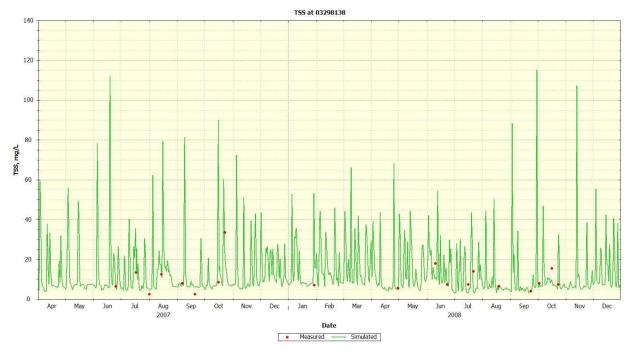


Figure A-281 Modeled vs. Observed TSS (mg/L) at 03298138

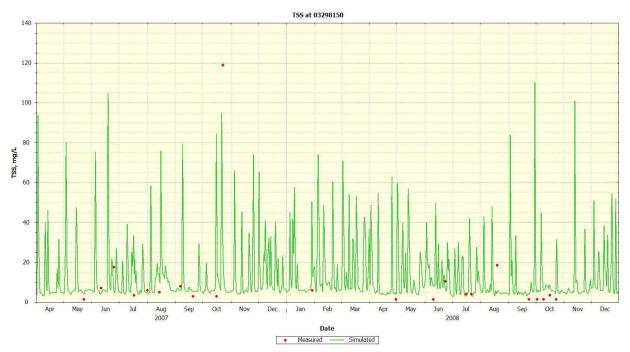


Figure A-282 Modeled vs. Observed TSS (mg/L) at 03298150

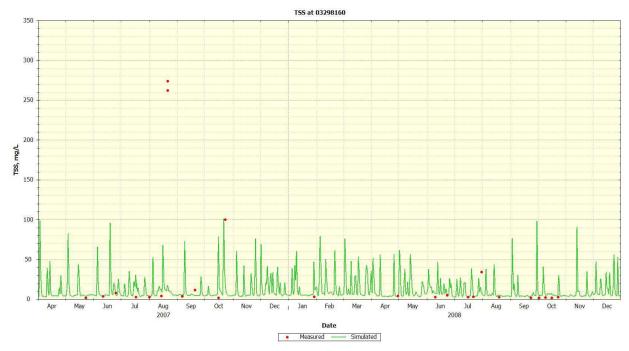


Figure A-283 Modeled vs. Observed TSS (mg/L) at 03298160

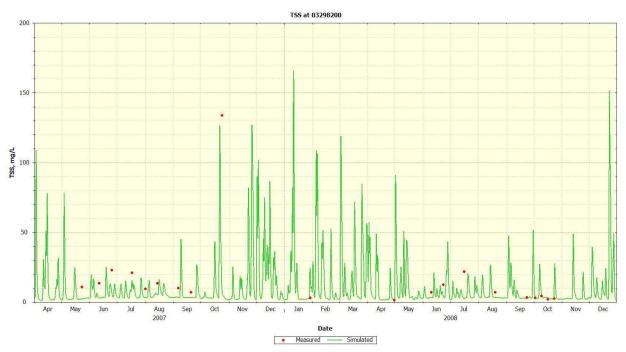


Figure A-284 Modeled vs. Observed TSS (mg/L) at 03298200

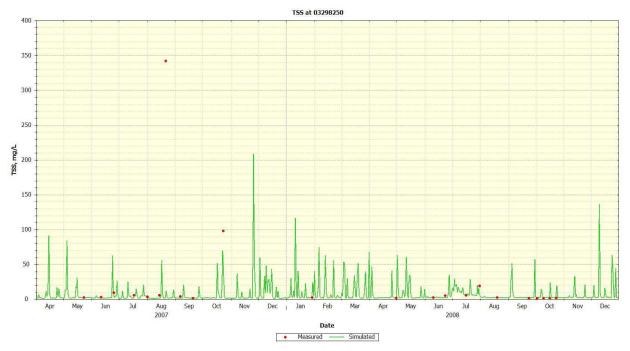


Figure A-285 Modeled vs. Observed TSS (mg/L) at 03298250

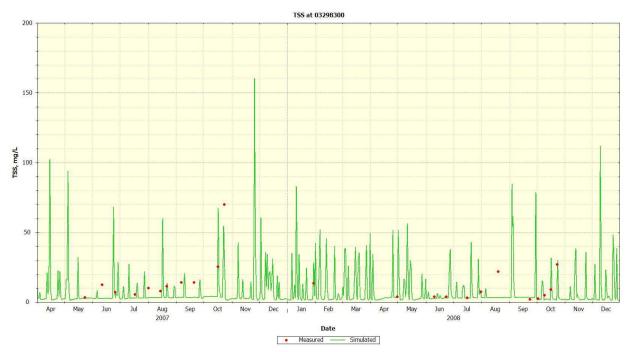


Figure A-286 Modeled vs. Observed TSS (mg/L) at 03298300

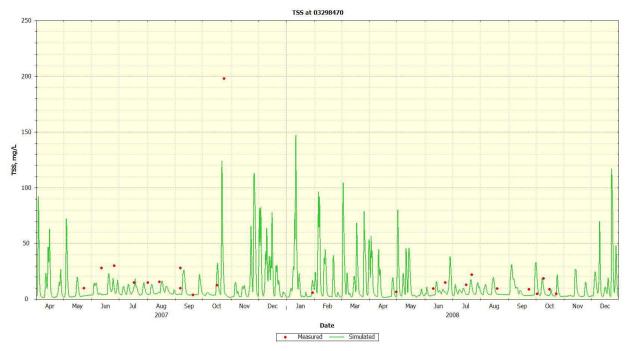


Figure A-287 Modeled vs. Observed TSS (mg/L) at 03298470

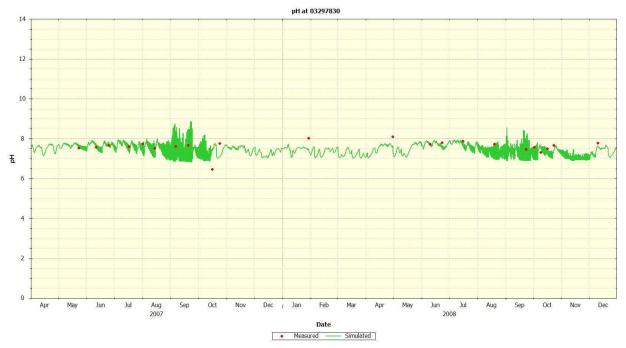


Figure A-288 Modeled vs. Observed pH at 03297830

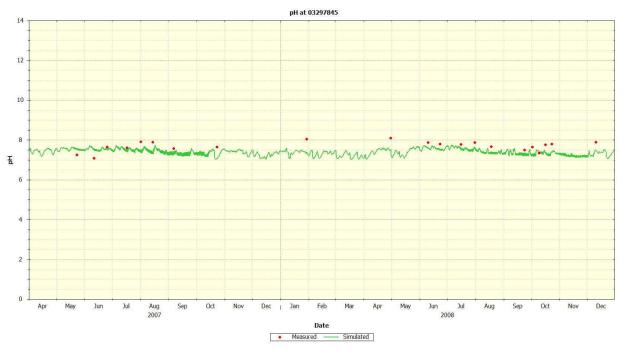


Figure A-289 Modeled vs. Observed pH at 03297845

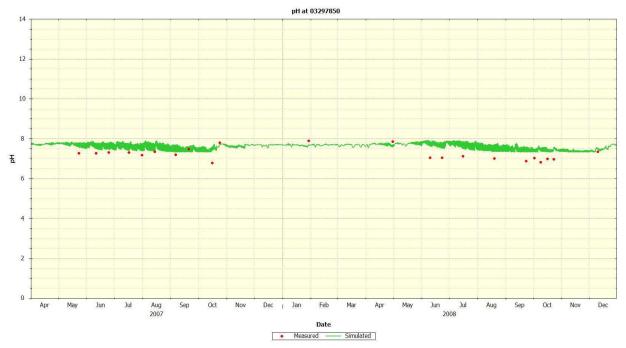


Figure A-290 Modeled vs. Observed pH at 03297850



Figure A-291 Modeled vs. Observed pH at 03297855

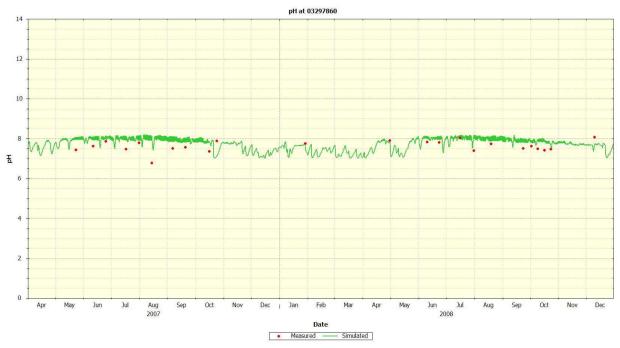


Figure A-292 Modeled vs. Observed pH at 03297860

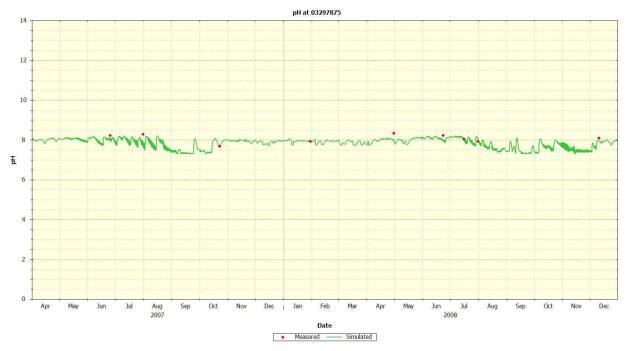


Figure A-293 Modeled vs. Observed pH at 03297875

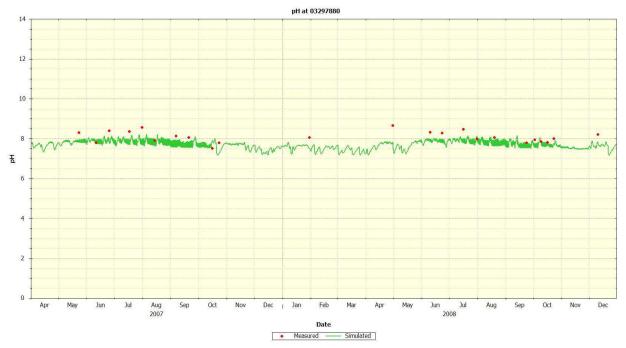


Figure A-294 Modeled vs. Observed pH at 03297880

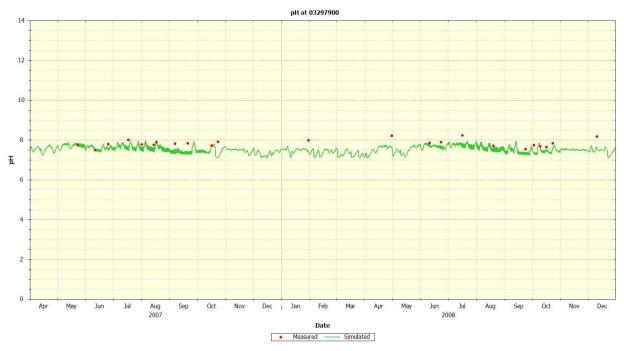


Figure A-295 Modeled vs. Observed pH at 03297900

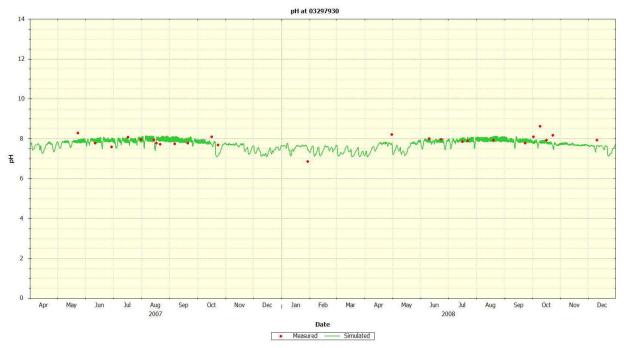


Figure A-296 Modeled vs. Observed pH at 03297930

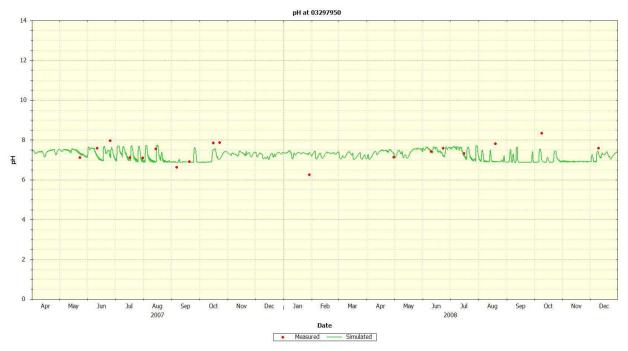


Figure A-297 Modeled vs. Observed pH at 03297950

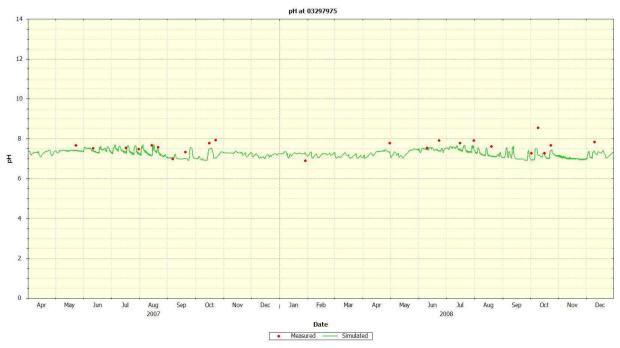


Figure A-298 Modeled vs. Observed pH at 03297975

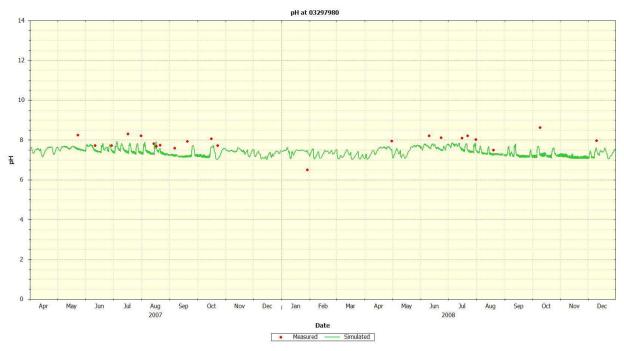


Figure A-299 Modeled vs. Observed pH at 03297980

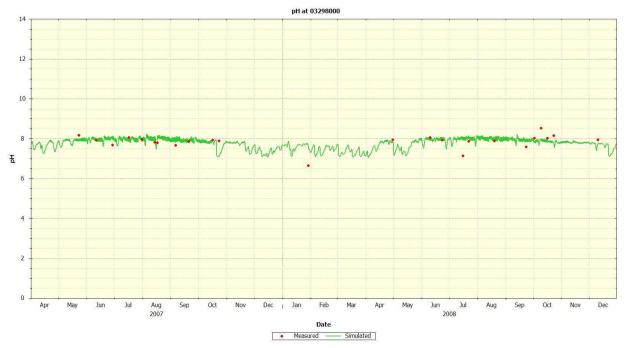


Figure A-300 Modeled vs. Observed pH at 03298000

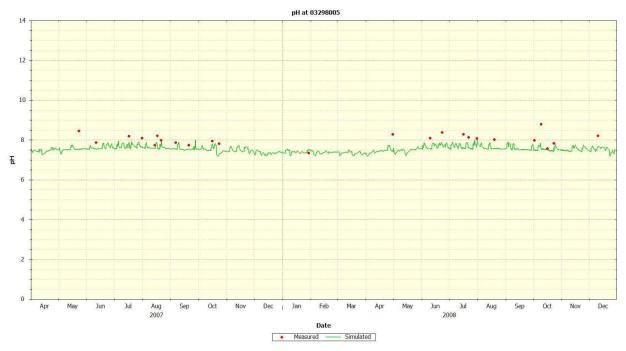


Figure A-301 Modeled vs. Observed pH at 03298005

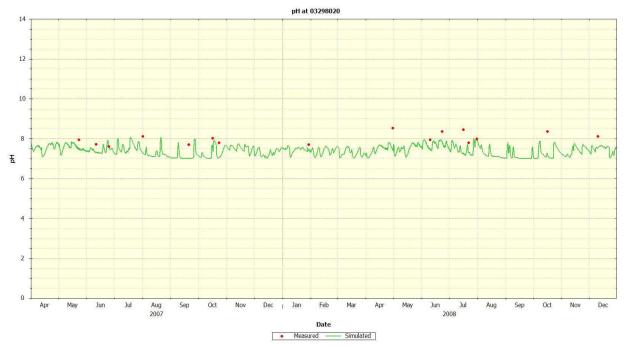


Figure A-302 Modeled vs. Observed pH at 03298020



Figure A-303 Modeled vs. Observed pH at 03298100

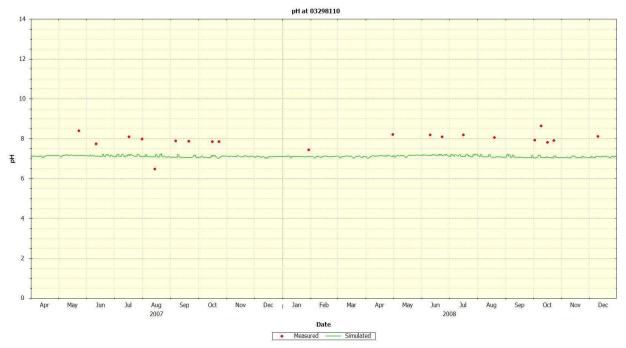


Figure A-304 Modeled vs. Observed pH at 03298110

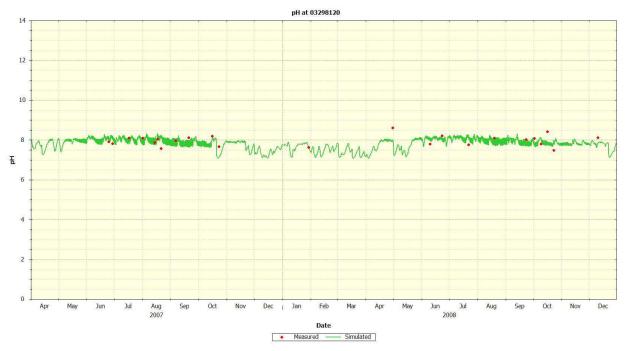


Figure A-305 Modeled vs. Observed pH at 03298120

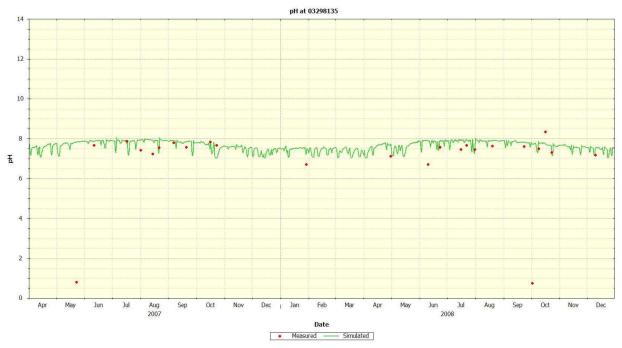


Figure A-306 Modeled vs. Observed pH at 03298135

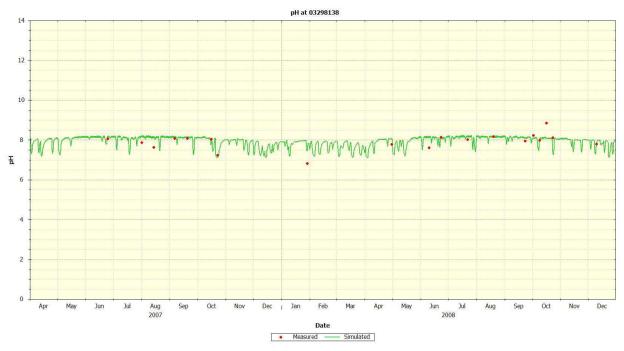


Figure A-307 Modeled vs. Observed pH at 03298138

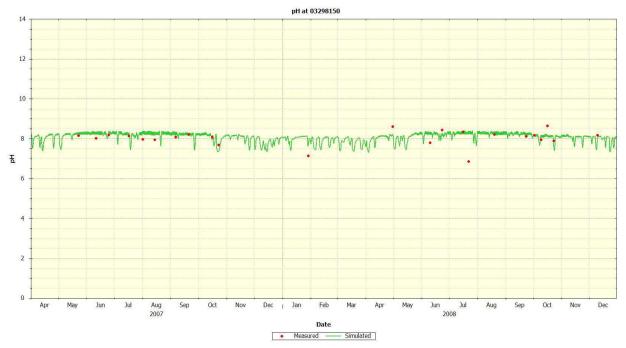


Figure A-308 Modeled vs. Observed pH at 03298150

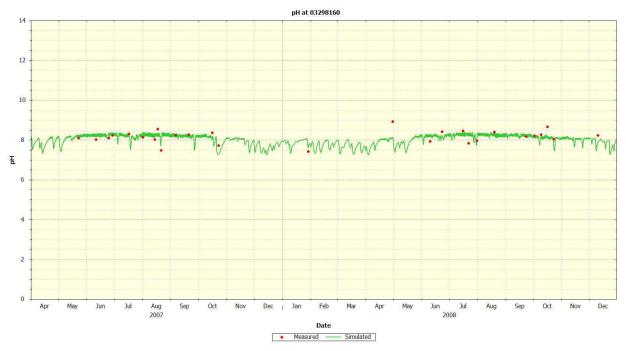


Figure A-309 Modeled vs. Observed pH at 03298160

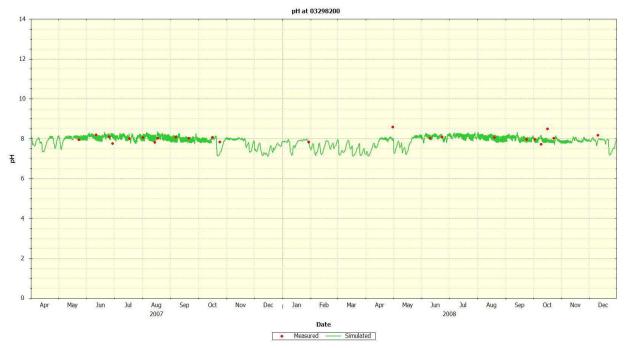


Figure A-310 Modeled vs. Observed pH at 03298200

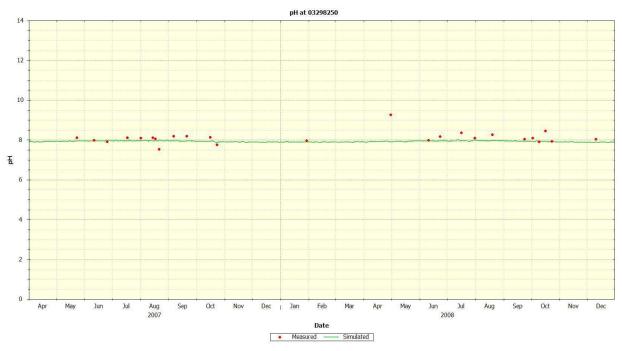


Figure A-311 Modeled vs. Observed pH at 03298250

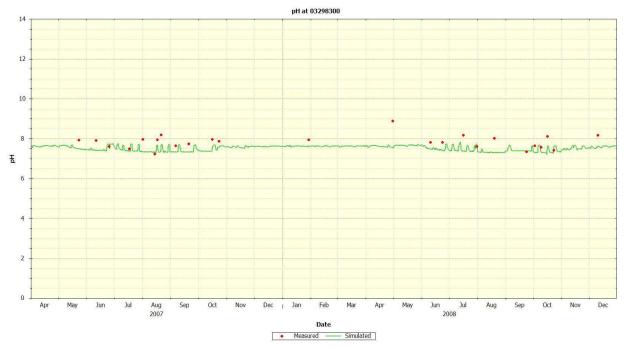


Figure A-312 Modeled vs. Observed pH at 03298300

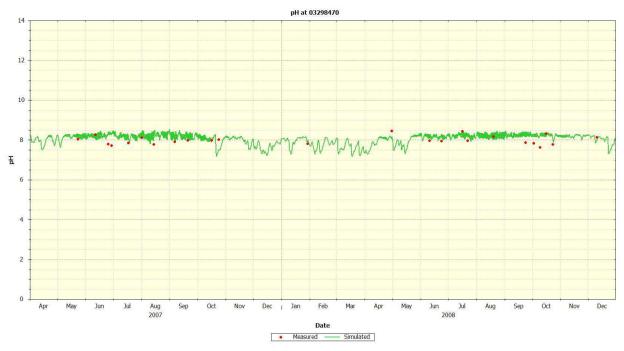


Figure A-313 Modeled vs. Observed pH at 03298470

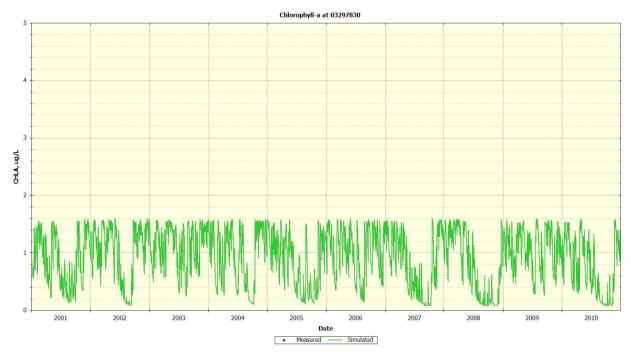


Figure A-314 Modeled Chlorophyll-a (µg/L) at 03297830

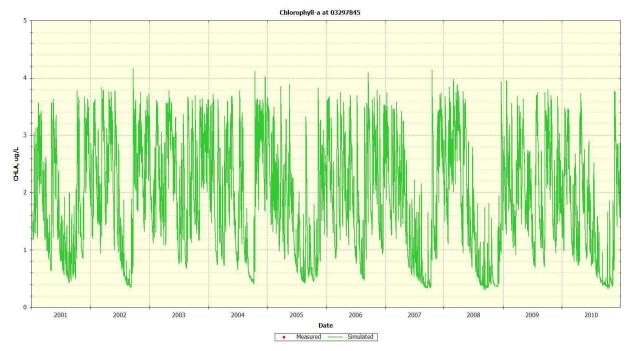


Figure A-315 Modeled Chlorophyll-a (µg/L) at 03297845

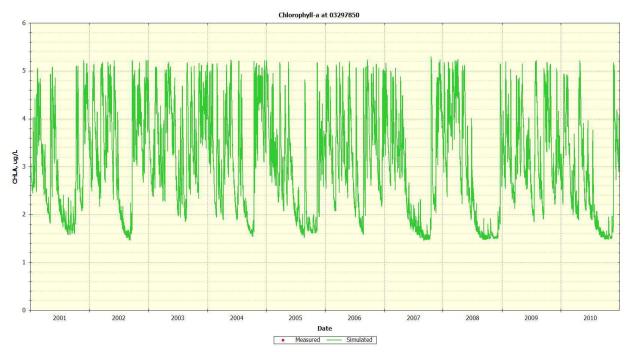


Figure A-316 Modeled Chlorophyll-a (µg/L) at 03297850

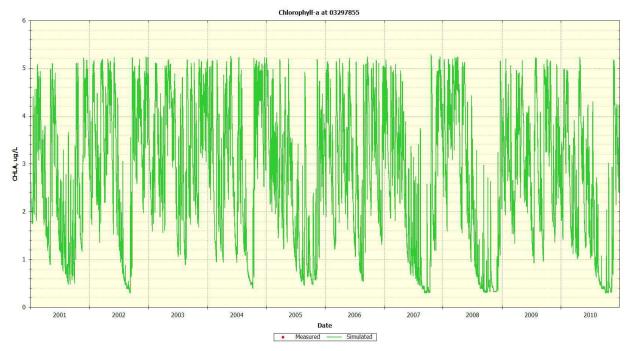


Figure A-317 Modeled Chlorophyll-a (µg/L) at 03297855

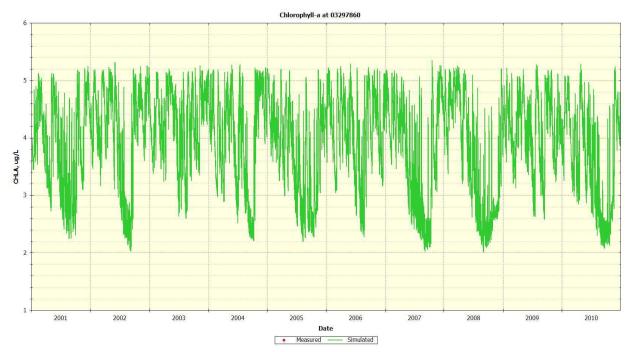


Figure A-318 Modeled Chlorophyll-a (µg/L) at 03297860

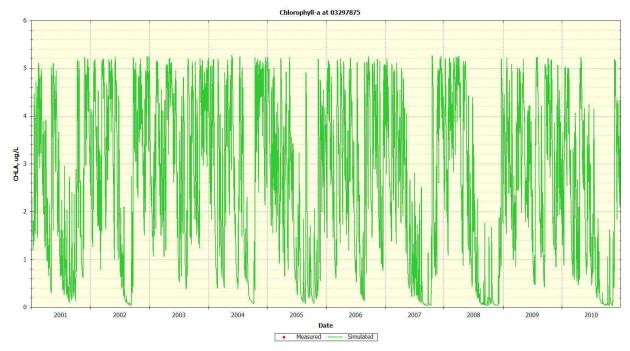


Figure A-319 Modeled Chlorophyll-a (µg/L) at 03297875

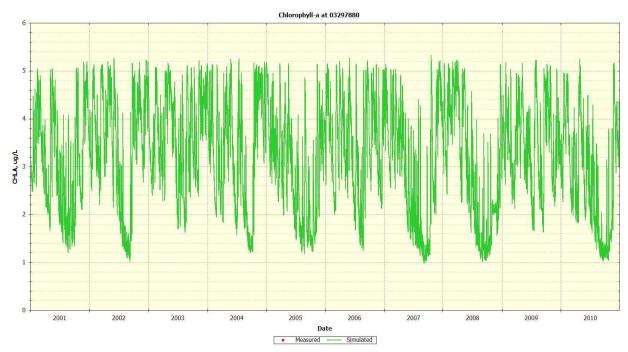


Figure A-320 Modeled Chlorophyll-a (µg/L) at 03297880

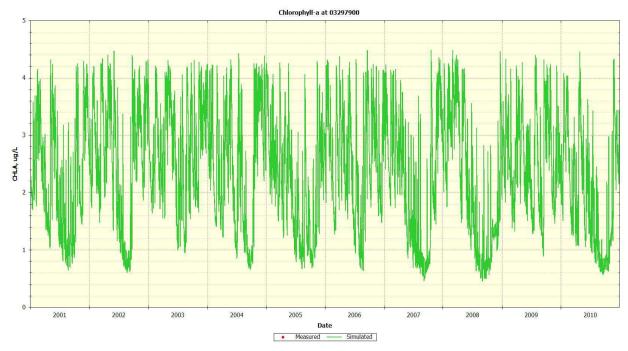


Figure A-321 Modeled Chlorophyll-a (µg/L) at 03297900

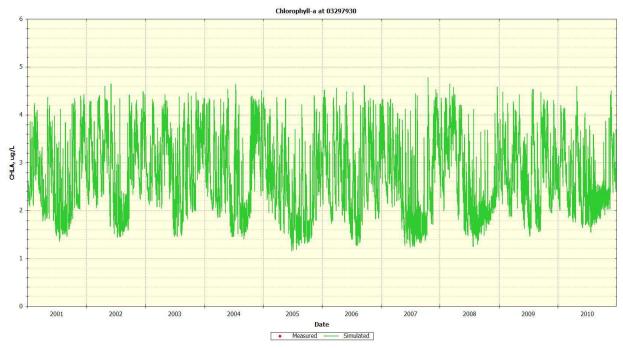


Figure A-322 Modeled Chlorophyll-a (µg/L) at 03297930

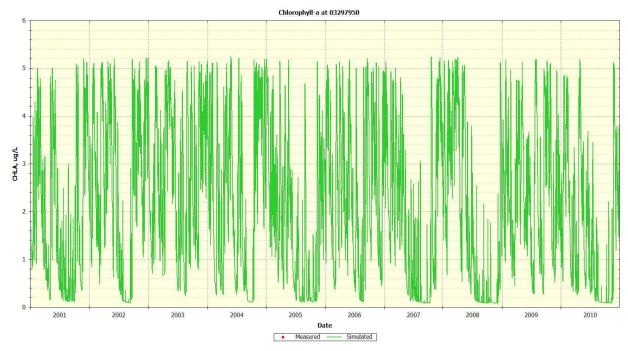


Figure A-323 Modeled Chlorophyll-a (µg/L) at 03297950

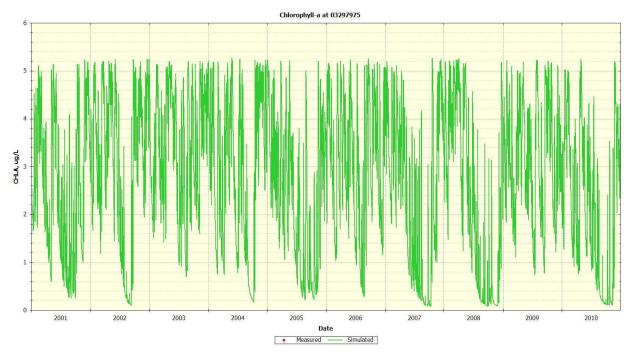


Figure A-324 Modeled Chlorophyll-a (µg/L) at 03297975

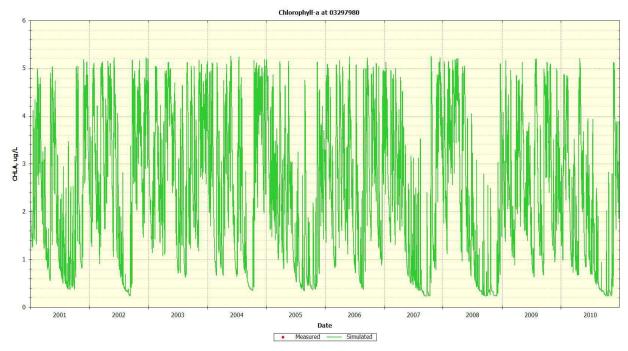


Figure A-325 Modeled Chlorophyll-a (µg/L) at 03297980

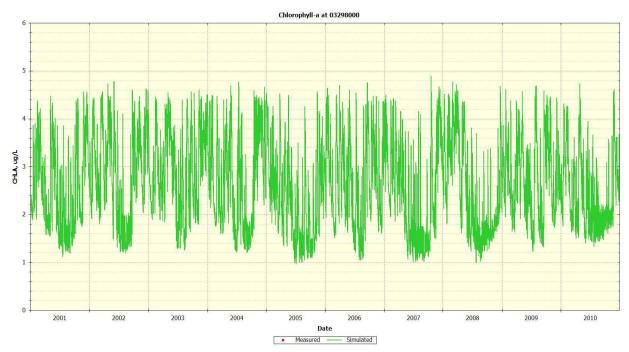


Figure A-326 Modeled Chlorophyll-a (µg/L) at 03298000

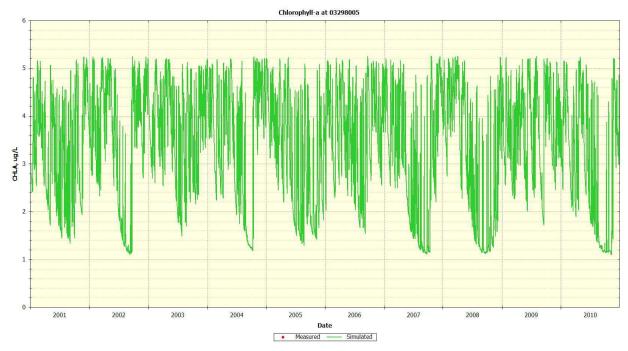


Figure A-327 Modeled Chlorophyll-a (µg/L) at 03298005

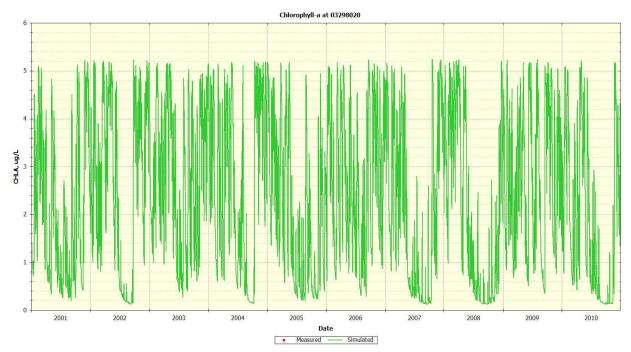


Figure A-328 Modeled Chlorophyll-a (µg/L) at 03298020

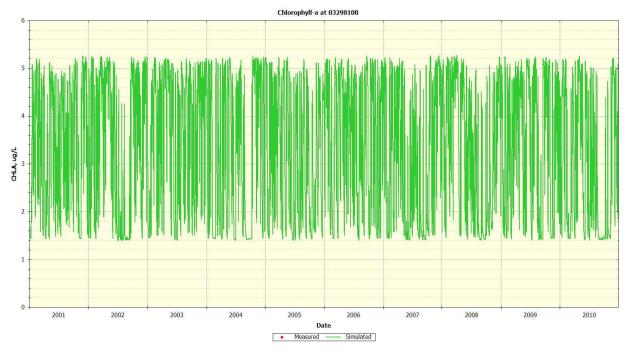


Figure A-329 Modeled Chlorophyll-a (µg/L) at 03298100

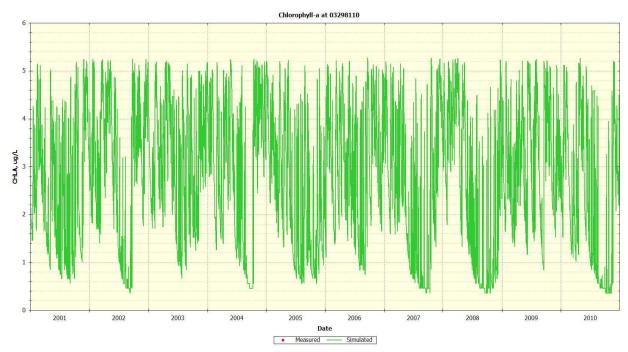


Figure A-330 Modeled Chlorophyll-a (µg/L) at 03298110

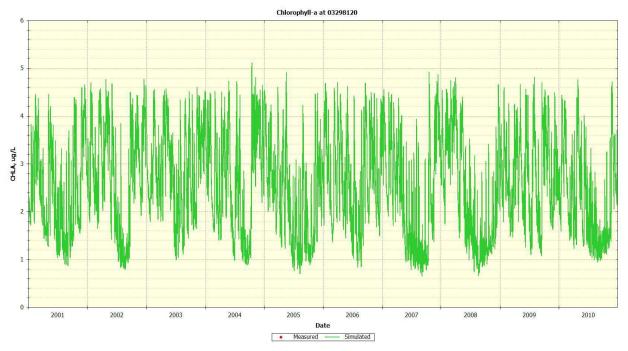


Figure A-331 Modeled Chlorophyll-a (µg/L) at 03298120

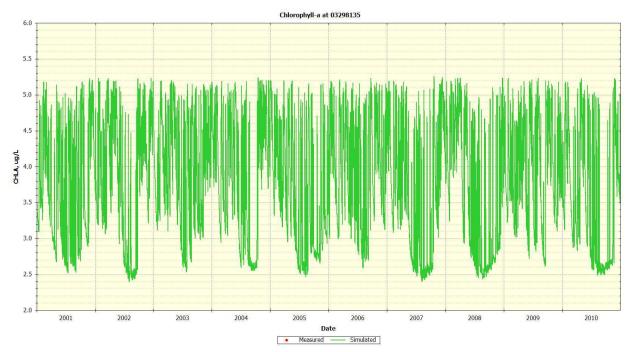


Figure A-332 Modeled Chlorophyll-a (µg/L) at 03298135

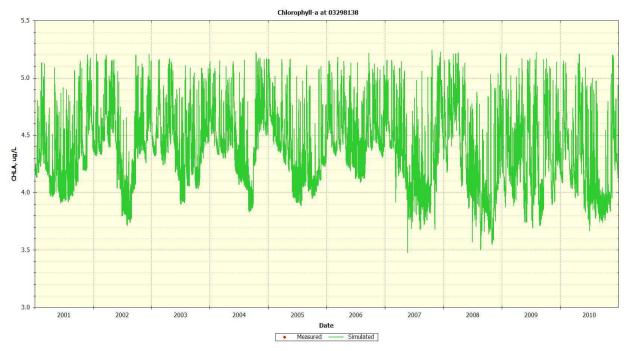


Figure A-333 Modeled Chlorophyll-a (µg/L) at 03298138

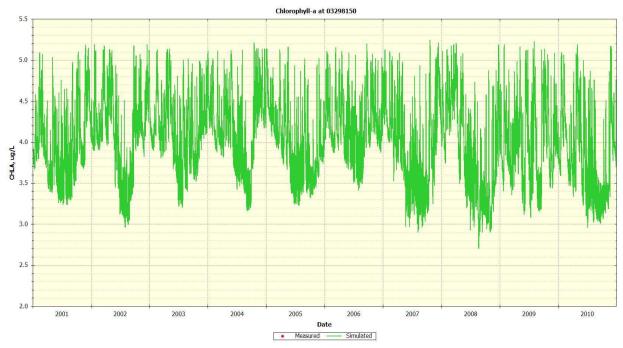


Figure A-334 Modeled Chlorophyll-a (µg/L) at 03298150

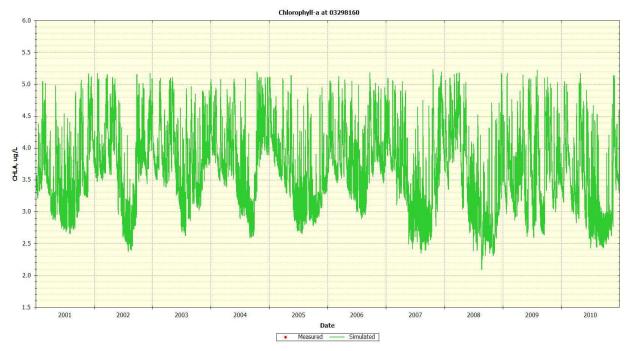


Figure A-335 Modeled Chlorophyll-a (µg/L) at 03298160

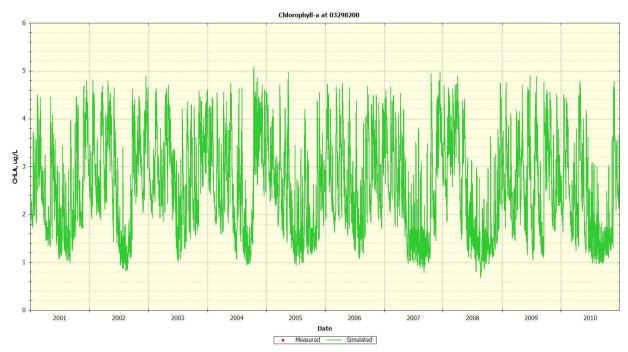


Figure A-336 Modeled Chlorophyll-a (µg/L) at 03298200

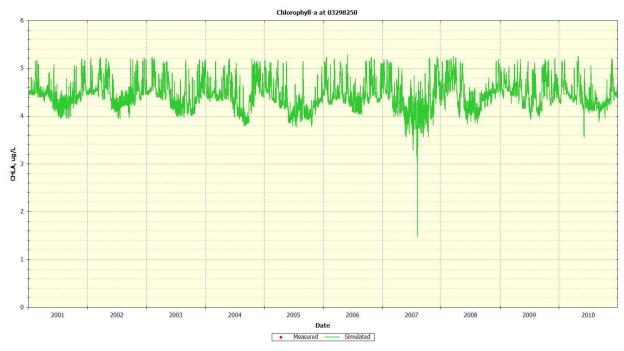


Figure A-337 Modeled Chlorophyll-a (µg/L) at 03298250

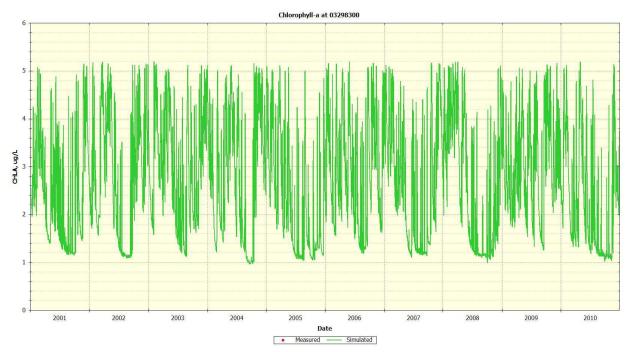


Figure A-338 Modeled Chlorophyll-a (µg/L) at 03298300

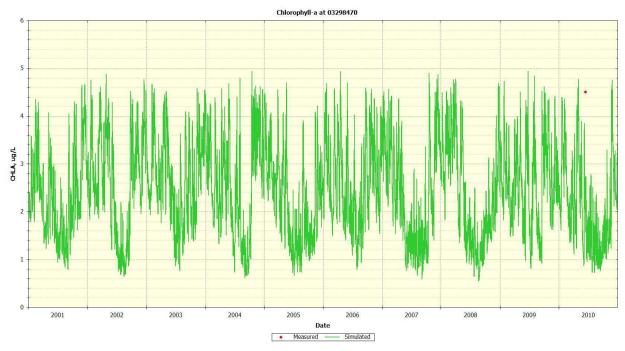


Figure A-339 Modeled Chlorophyll-a (µg/L) at 03298470

Table A-2 Summary Qualitative and Quantitative scores for the USGS Water Quality Calibration Stations

|          | Location: Main Ster                                     | m, Floyds Fo | ork        |                    |    |  |
|----------|---|--------------|------------|--------------------|----|--|
| Station  | Station Name  | Qualita      | tive score | Quantitative score |    |  |
| Station  | Station Name  | TN           | TP         | TN                 | TP |  |
| 03297830 | Floyds Fork at Highway 53                               | G            | G          | 41                 | 42 |  |
| 03297845 | Floyds Fork near Crestwood                              | G            | F          | 45                 | 79 |  |
| 03297900 | Floyds Fork near Peewee Valley                          | G            | F          | 39                 | 71 |  |
| 03297930 | Floyds Fork at Echo trail bridge                        | G            | F          | 63                 | 75 |  |
| 03298000 | Floyds Fork at Fisherville                              | G            | G          | 42                 | 46 |  |
| 03298120 | Floyds Fork at Seatonville Road                         | G            | G          | 40                 | 60 |  |
| 03298200 | Floyds Fork near Mt. Washington                         | G            | VG         | 44                 | 6  |  |
| 03298470 | Floyds Fork near Shepherdsville                         | G            | VG         | 37                 | 29 |  |
|          | Location: Tributarie                                    | s            |            |                    |    |  |
| 03297850 | South Fork Curry's Fork at Moody Lane                   | G            | F          | 67                 | 73 |  |
| 03297855 | South Fork Curry's Fork at Highway 393                  | VG           | VG         | 23                 | 1  |  |
| 03297860 | North Fork Curry's Fork at Stone Ridge road             | G            | F          | 51                 | 74 |  |
| 03297875 | Ashers Run at Abbott lane near<br>Crestwood             | G            | G          | 44                 | 55 |  |
| 03297880 | Currys Fork near Crestwood                              | VG           | G          | 19                 | 41 |  |
| 03297950 | Long Run at Old stage coach road                        | G            | VG         | 32                 | 9  |  |
| 03297975 | South Long Run at Hobbs Lane                            | VG           | G          | 3                  | 55 |  |
| 03297980 | Long Run near Fisherville                               | VG           | G          | 12                 | 61 |  |
| 03298005 | Pope lick at South poope lick road near<br>Fisherville  | VG           | G          | 11                 | 41 |  |
| 03298020 | Cane Run at Thurman Road                                | VG           | G          | 23                 | 67 |  |
| 03298100 | Pope lick at pope lick road near<br>Middletown          | G            | F          | 56                 | 70 |  |
| 03298110 | Pope lick at Rehl road near Fisherville                 | VG           | VG         | 19                 | 27 |  |
| 03298135 | Chenoweth Run at Ruckriegal Parkway                     | G            | VG         | 42                 | 20 |  |
| 03298138 | Chenoweth Run at Jeffersontown STP at Jeffersontown     | G            | G          | 65                 | 62 |  |
| 03298150 | Chenoweth Run at Gelhaus Lane near<br>Fern creek        | G            | G          | 61                 | 35 |  |
| 03298160 | Chenoweth Run at Seatonville road near<br>Jeffersontown | G            | VG         | 37                 | 14 |  |
| 03298250 | Cedar Creek at Thixton Road                             | G            | VG         | 54                 | 6  |  |
| 03298300 | Pennsylvania Run at Mt. Washington                      | VG           | G          | 27                 | 38 |  |

Table A-3 Calibration Statistics for TN for USGS Water Quality Calibration Stations utilized in the Floyds Fork model

| 0                                 | Co. cl. N   | Measured |              |           | Simulated |         |          | Difference |         |          |
|-----------------------------------|---|----------|--------------|-----------|-----------|---------|----------|------------|---------|----------|
| Station                           | Station Name  | Mean     | 5 %tile      | 95 %tile  | Mean      | 5 %tile | 95 %tile | Mean       | 5 %tile | 95 %tile |
| Location : Main Stem, Floyds Fork |   |          |              |           |           |         |          |            |         |          |
| 03297830                          | Floyds Fork at Highway 53                               | 1.161    | 0.295        | 3.730     | 0.699     | 0.322   | 1.263    | -0.462     | -0.027  | 2.467    |
| 03297845                          | Floyds Fork near Crestwood                              | 1.366    | 0.408        | 4.560     | 0.548     | 0.351   | 1.007    | -0.818     | 0.057   | 3.553    |
| 03297900                          | Floyds Fork near Peewee Valley                          | 4.079    | 0.720        | 8.506     | 6.389     | 1.063   | 10.949   | 2.310      | -0.343  | -2.443   |
| 03297930                          | Floyds Fork at Echo trail bridge                        | 3.919    | 2.123        | 9.463     | 4.061     | 1.214   | 6.692    | 0.143      | 0.909   | 2.770    |
| 03298000                          | Floyds Fork at Fisherville                              | 2.770    | 1.489        | 6.205     | 3.684     | 0.990   | 6.562    | 0.914      | 0.499   | -0.357   |
| 03298120                          | Floyds Fork at Seatonville Road                         | 1.291    | 0.406        | 3.168     | 3.246     | 0.845   | 7.435    | 1.955      | -0.439  | -4.267   |
| 03298200                          | Floyds Fork near Mt. Washington                         | 3.543    | 1.474        | 7.863     | 3.988     | 1.112   | 7.681    | 0.445      | 0.362   | 0.182    |
| 03298470                          | Floyds Fork near Shepherdsville                         | 2.183    | 1.026        | 4.606     | 3.348     | 0.993   | 6.122    | 1.165      | 0.033   | -1.517   |
|                                   |   | L        | ocation: Tri | ibutaries |           |         |          |            | •       |          |
| 03297850                          | South Fork Curry's Fork at Moody Lane                   | 8.393    | 1.758        | 18.552    | 4.877     | 0.931   | 6.306    | -3.515     | 0.827   | 12.246   |
| 03297855                          | South Fork Curry's Fork at Highway 393                  | 1.049    | 0.411        | 2.424     | 2.196     | 1.142   | 3.871    | 1.147      | -0.731  | -1.447   |
| 03297860                          | North Fork Curry's Fork at Stone Ridge road             | 15.263   | 2.632        | 30.050    | 13.732    | 2.011   | 18.514   | -1.531     | 0.621   | 11.536   |
| 03297875                          | Ashers Run at Abbott lane near<br>Crestwood             | 1.305    | 0.000        | 0.000     | 0.441     | 0.000   | 0.000    | -0.864     | 0.000   | 0.000    |
| 03297880                          | Currys Fork near Crestwood                              | 5.992    | 1.181        | 17.239    | 9.019     | 1.126   | 13.709   | 3.027      | 0.055   | 3.531    |
| 03297950                          | Long Run at Old stage coach road                        | 0.674    | 0.000        | 0.000     | 0.271     | 0.000   | 0.000    | -0.402     | 0.000   | 0.000    |
| 03297975                          | South Long Run at Hobbs Lane                            | 0.833    | 0.243        | 2.103     | 0.332     | 0.088   | 0.899    | -0.502     | 0.155   | 1.203    |
| 03297980                          | Long Run near Fisherville                               | 1.012    | 0.266        | 3.050     | 0.349     | 0.158   | 0.883    | -0.663     | 0.108   | 2.167    |
| 03298005                          | Pope lick at South poope lick road near<br>Fisherville  | 0.590    | 0.239        | 1.795     | 0.369     | 0.190   | 0.945    | -0.221     | 0.049   | 0.851    |
| 03298020                          | Cane Run at Thurman Road                                | 1.073    | 0.000        | 0.000     | 0.334     | 0.000   | 0.000    | -0.739     | 0.000   | 0.000    |
| 03298100                          | Pope lick at pope lick road near<br>Middletown          | 0.765    | 0.230        | 1.817     | 0.319     | 0.133   | 0.898    | -0.445     | 0.097   | 0.919    |
| 03298110                          | Pope lick at Rehl road near Fisherville                 | 0.585    | 0.242        | 1.718     | 0.253     | 0.081   | 0.829    | -0.331     | 0.161   | 0.889    |
| 03298135                          | Chenoweth Run at Ruckriegal Parkway                     | 0.948    | 0.320        | 2.123     | 0.482     | 0.304   | 1.268    | -0.466     | 0.016   | 0.855    |
| 03298138                          | Chenoweth Run at Jeffersontown STP at<br>Jeffersontown  | 18.619   | 10.260       | 34.300    | 8.632     | 0.864   | 30.854   | -9.986     | 9.396   | 3.446    |
| 03298150                          | Chenoweth Run at Gelhaus Lane near<br>Fern creek        | 12.461   | 2.549        | 20.720    | 7.070     | 1.214   | 25.807   | -5.391     | 1.336   | -5.087   |
| 03298160                          | Chenoweth Run at Seatonville road near<br>Jeffersontown | 10.029   | 2.079        | 18.964    | 6.266     | 0.783   | 23.706   | -3.764     | 1.297   | -4.742   |
| 03298250                          | Cedar Creek at Thixton Road                             | 4.584    | 2.055        | 7.658     | 1.385     | 0.586   | 3.663    | -3.199     | 1.469   | 3.994    |
| 03298300                          | Pennsylvania Run at Mt. Washington                      | 4.085    | 0.538        | 14.604    | 2.926     | 0.901   | 4.241    | -1.159     | -0.363  | 10.363   |

Table A-4 Calibration Statistics for TP for USGS Water Quality Calibration Stations utilized in the Floyds Fork model

| Ct. 41                            | C. C. N   | Measured |              |           | Simulated |         |          | Difference |         |          |
|-----------------------------------|---|----------|--------------|-----------|-----------|---------|----------|------------|---------|----------|
| Station                           | Station Name  | Mean     | 5 %tile      | 95 %tile  | Mean      | 5 %tile | 95 %tile | Mean       | 5 %tile | 95 %tile |
| Location : Main Stem, Floyds Fork |   |          |              |           |           |         |          |            |         |          |
| 03297830                          | Floyds Fork at Highway 53                               | 0.153    | 0.041        | 0.367     | 0.218     | 0.059   | 0.548    | 0.065      | -0.017  | -0.182   |
| 03297845                          | Floyds Fork near Crestwood                              | 0.377    | 0.045        | 2.051     | 0.111     | 0.041   | 0.218    | -0.267     | 0.004   | 1.833    |
| 03297900                          | Floyds Fork near Peewee Valley                          | 0.583    | 0.132        | 1.294     | 0.722     | 0.078   | 1.366    | 0.139      | 0.054   | -0.072   |
| 03297930                          | Floyds Fork at Echo trail bridge                        | 0.287    | 0.113        | 1.902     | 0.714     | 0.125   | 1.399    | 0.427      | -0.013  | 0.503    |
| 03298000                          | Floyds Fork at Fisherville                              | 0.183    | 0.081        | 0.650     | 0.652     | 0.085   | 1.303    | 0.468      | -0.004  | -0.652   |
| 03298120                          | Floyds Fork at Seatonville Road                         | 0.138    | 0.041        | 1.033     | 0.566     | 0.062   | 1.115    | 0.428      | -0.021  | -0.081   |
| 03298200                          | Floyds Fork near Mt. Washington                         | 0.144    | 0.042        | 0.406     | 0.496     | 0.076   | 0.805    | 0.352      | -0.034  | -0.399   |
| 03298470                          | Floyds Fork near Shepherdsville                         | 0.192    | 0.062        | 0.447     | 0.552     | 0.086   | 0.978    | 0.361      | -0.025  | -0.531   |
|                                   |   | L        | ocation: Tri | ibutaries |           |         |          |            | •       |          |
| 03297850                          | South Fork Curry's Fork at Moody Lane                   | 2.250    | 0.266        | 3.410     | 1.217     | 0.105   | 1.568    | -1.033     | 0.160   | 1.841    |
| 03297855                          | South Fork Curry's Fork at Highway 393                  | 0.197    | 0.030        | 0.656     | 0.660     | 0.097   | 1.224    | 0.463      | -0.067  | -0.568   |
| 03297860                          | North Fork Curry's Fork at Stone Ridge road             | 1.950    | 0.254        | 3.797     | 0.771     | 0.121   | 1.232    | -1.179     | 0.132   | 2.565    |
| 03297875                          | Ashers Run at Abbott lane near<br>Crestwood             | 0.128    | 0.000        | 0.000     | 0.067     | 0.000   | 0.000    | -0.061     | 0.000   | 0.000    |
| 03297880                          | Currys Fork near Crestwood                              | 0.719    | 0.149        | 2.088     | 0.715     | 0.080   | 1.297    | -0.004     | 0.069   | 0.791    |
| 03297950                          | Long Run at Old stage coach road                        | 0.071    | 0.000        | 0.000     | 0.047     | 0.000   | 0.000    | -0.024     | 0.000   | 0.000    |
| 03297975                          | South Long Run at Hobbs Lane                            | 0.196    | 0.060        | 0.744     | 0.045     | 0.023   | 0.097    | -0.151     | 0.037   | 0.647    |
| 03297980                          | Long Run near Fisherville                               | 0.170    | 0.026        | 0.785     | 0.052     | 0.024   | 0.084    | -0.118     | 0.002   | 0.701    |
| 03298005                          | Pope lick at South poope lick road near<br>Fisherville  | 0.053    | 0.011        | 0.237     | 0.046     | 0.024   | 0.127    | -0.007     | -0.013  | 0.110    |
| 03298020                          | Cane Run at Thurman Road                                | 0.204    | 0.000        | 0.000     | 0.052     | 0.000   | 0.000    | -0.152     | 0.000   | 0.000    |
| 03298100                          | Pope lick at pope lick road near<br>Middletown          | 0.066    | 0.017        | 0.296     | 0.039     | 0.022   | 0.115    | -0.027     | -0.005  | 0.181    |
| 03298110                          | Pope lick at Rehl road near Fisherville                 | 0.047    | 0.013        | 0.230     | 0.049     | 0.020   | 0.097    | 0.002      | -0.007  | 0.134    |
| 03298135                          | Chenoweth Run at Ruckriegal Parkway                     | 0.031    | 0.010        | 0.139     | 0.038     | 0.020   | 0.135    | 0.007      | -0.010  | 0.004    |
| 03298138                          | Chenoweth Run at Jeffersontown STP at Jeffersontown     | 0.877    | 0.195        | 2.180     | 0.410     | 0.067   | 0.976    | -0.467     | 0.128   | 1.204    |
| 03298150                          | Chenoweth Run at Gelhaus Lane near<br>Fern creek        | 0.440    | 0.089        | 1.564     | 0.508     | 0.077   | 0.870    | 0.068      | 0.012   | 0.694    |
| 03298160                          | Chenoweth Run at Seatonville road near<br>Jeffersontown | 0.363    | 0.062        | 1.087     | 0.469     | 0.063   | 0.794    | 0.106      | -0.001  | 0.293    |
| 03298250                          | Cedar Creek at Thixton Road                             | 0.339    | 0.033        | 1.174     | 0.384     | 0.060   | 0.896    | 0.045      | -0.027  | 0.278    |
| 03298300                          | Pennsylvania Run at Mt. Washington                      | 0.868    | 0.063        | 2.240     | 0.650     | 0.054   | 1.104    | -0.219     | 0.008   | 1.136    |

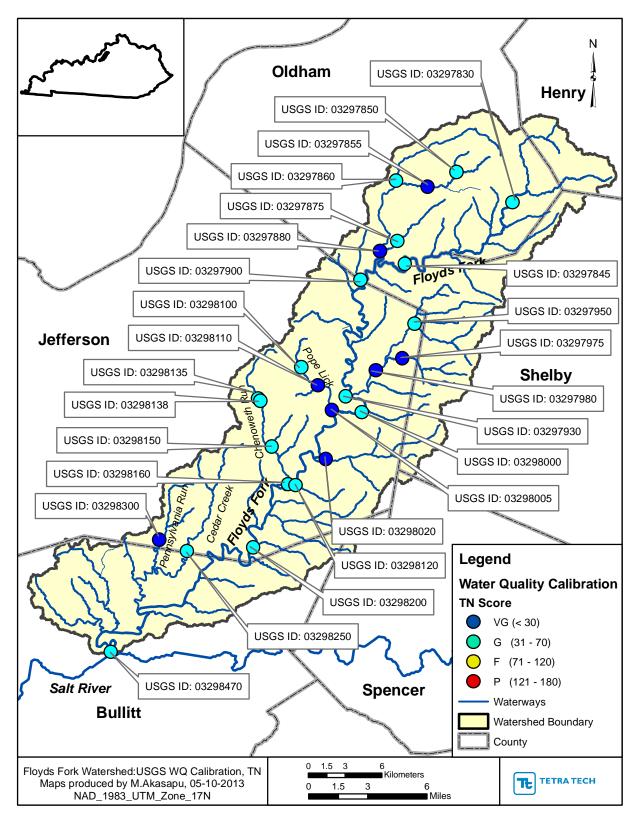


Figure A-340 USGS Water Quality for TN in the Floyds Fork Watershed

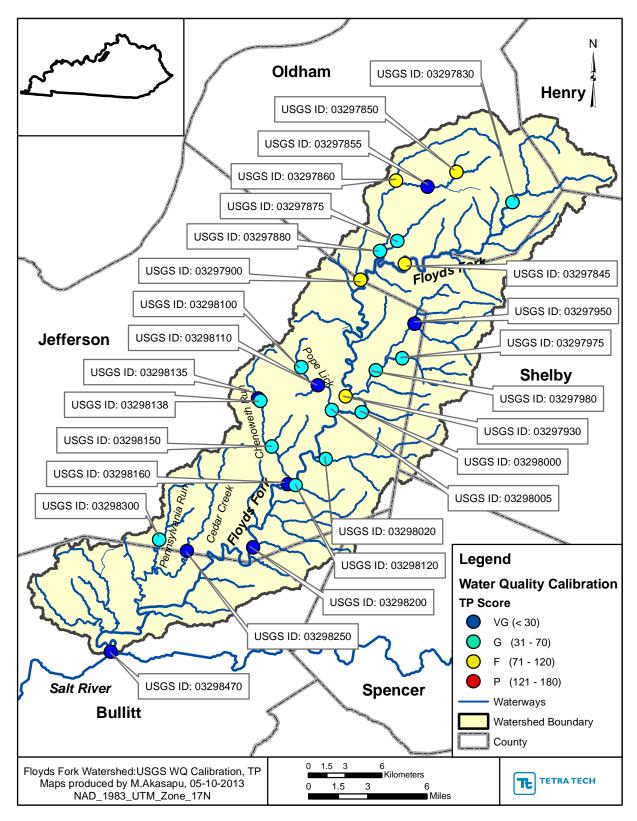


Figure A-341 USGS Water Quality for TP in the Floyds Fork Watershed

## Table A-5 MSD Water Quality Validation Stations

| Station  | Agency | Site Name                               | USGS<br>Drainage<br>Area (mi²) | USGS<br>Drainage<br>Area (acres) | WASP<br>Segment | Туре       | Parameter  |
|----------|--------|---|--------------------------------|----------------------------------|-----------------|------------|--|
| EFFFF001 | MSD    | Floyds Fork at Ash Avenue               | 80                             | 51136                            | 208             | Validation | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| EFFFF002 | MSD    | Floyds Fork at BardStown Road           | 213                            | 136320                           | 210             | Validation | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| EFFFF003 | MSD    | Floyds Fork at Old Taylorsville Road    | 138                            | 88320                            | 209             | Validation | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| EFFCR001 | MSD    | Chenoweth Run # 1 at Gelhaus Lane       | 12                             | 7424                             | 211             | Validation | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |
| EFFCR002 | MSD    | Chenoweth Run # 1 at Rickriegal Parkway | 5                              | 3501                             | 140             | Validation | TEMP, DO,CBOD,TN, NH <sub>3</sub> , NO <sub>X</sub> , ORGN, TP, PO <sub>4</sub> , ORGP, TSS, pH, Chlorophyll-a |

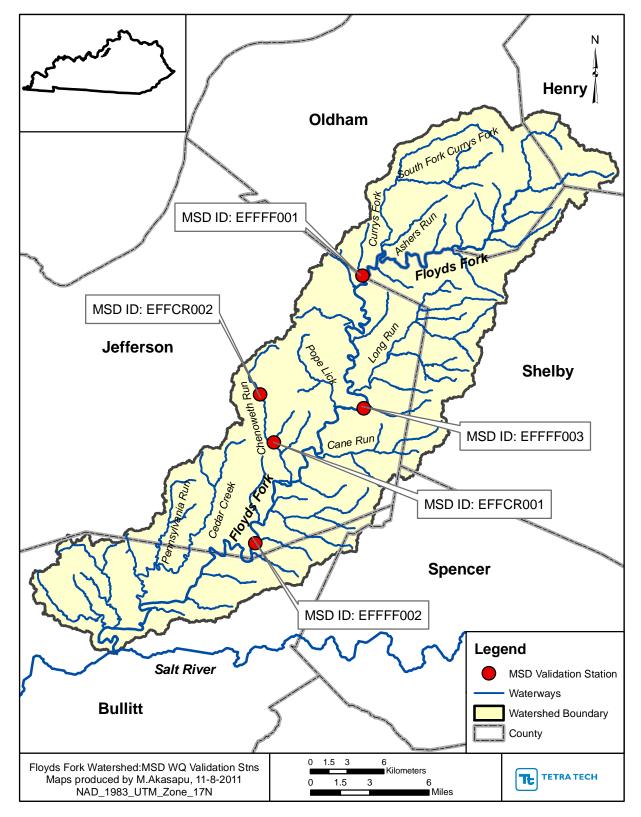


Figure A-342 MSD Water Quality Validation Stations Utilized in the Floyds Fork Watershed Model

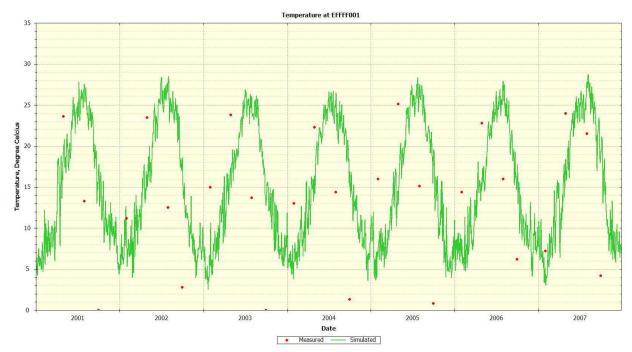


Figure A-343 Modeled vs. Observed TEMP (° C) at EFFFF001

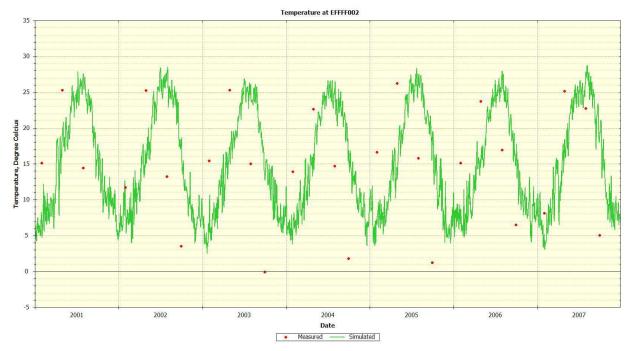


Figure A-344 Modeled vs. Observed TEMP (° C) at EFFFF002

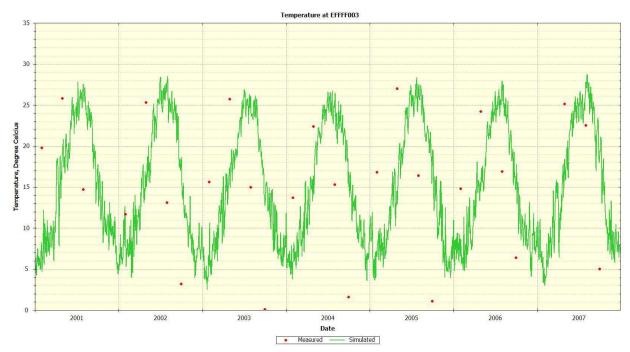


Figure A-345 Modeled vs. Observed TEMP (° C) at EFFFF003

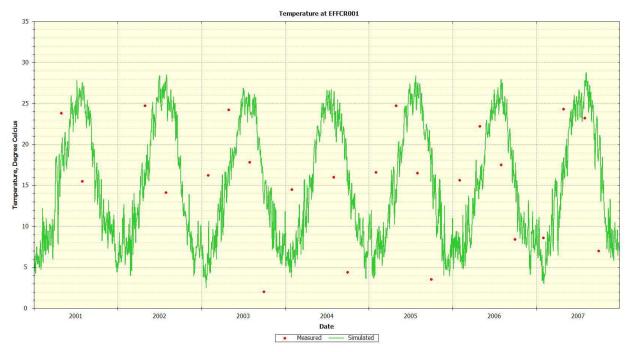


Figure A-346 Modeled vs. Observed TEMP (° C) at EFFCR001

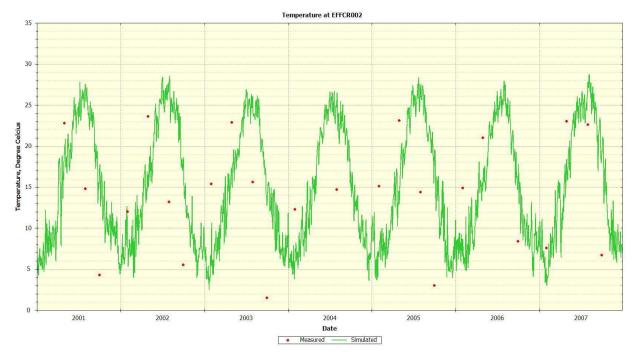


Figure A-347 Modeled vs. Observed TEMP (° C) at EFFCR002

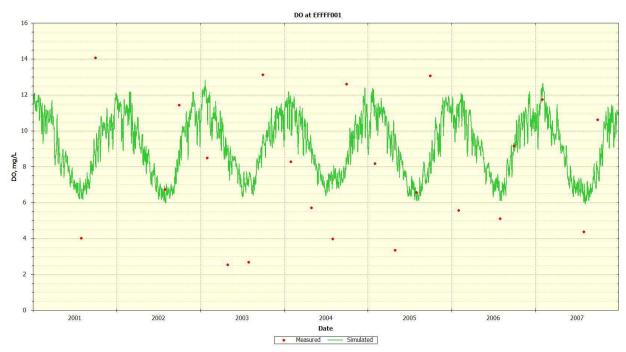


Figure A-348 Modeled vs. Observed DO (mg/L) at EFFFF001

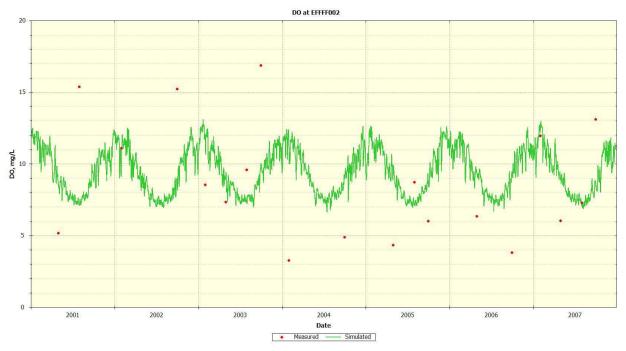


Figure A-349 Modeled vs. Observed DO (mg/L) at EFFFF002

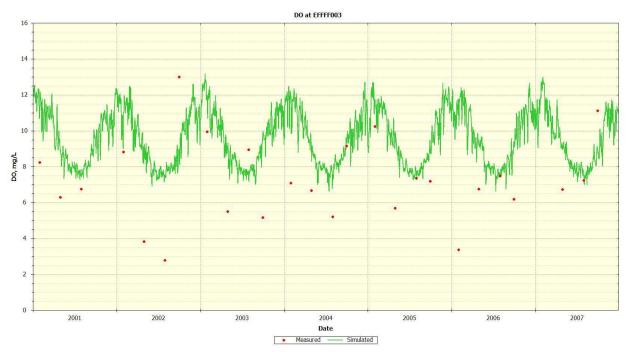


Figure A-350 Modeled vs. Observed DO (mg/L) at EFFFF003

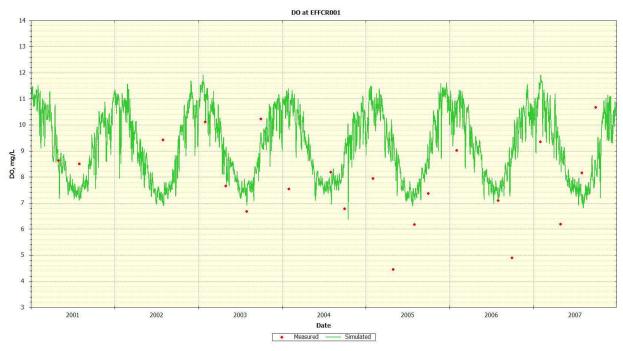


Figure A-351 Modeled vs. Observed DO (mg/L) at EFFCR001

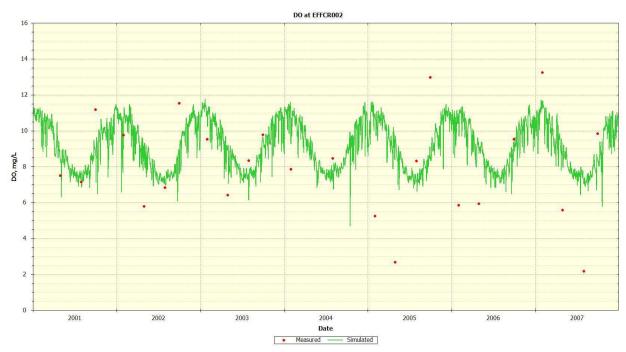


Figure A-352 Modeled vs. Observed DO (mg/L) at EFFCR002

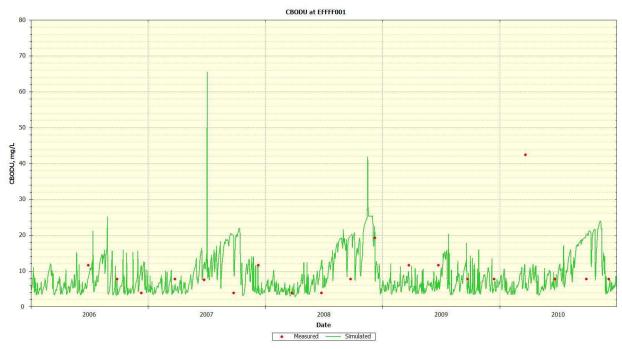


Figure A-353 Modeled vs. Observed CBOD (mg/L) at EFFFF001

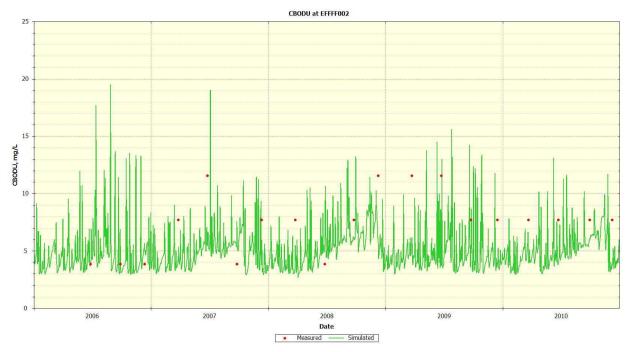


Figure A-354 Modeled vs. Observed CBOD (mg/L) at EFFFF002

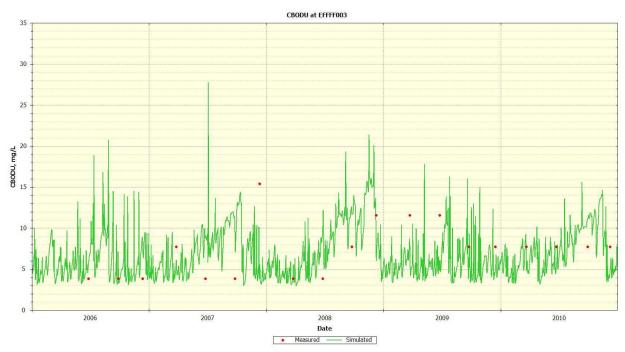


Figure A-355 Modeled vs. Observed CBOD (mg/L) at EFFFF003

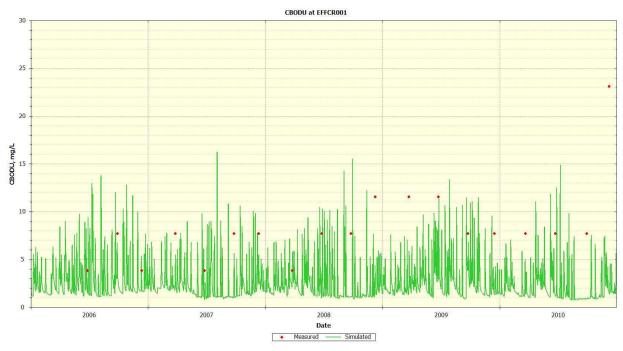


Figure A-356 Modeled vs. Observed CBOD (mg/L) at EFFCR001

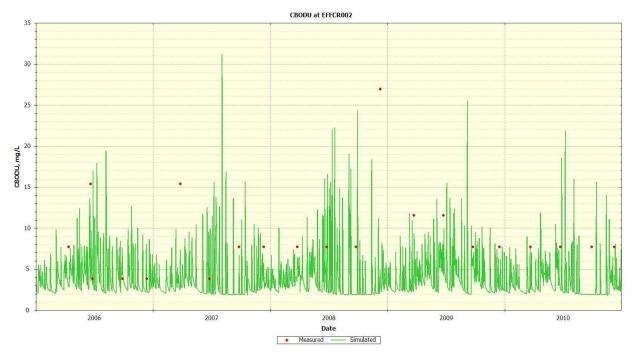


Figure A-357 Modeled vs. Observed CBOD (mg/L) at EFFCR002

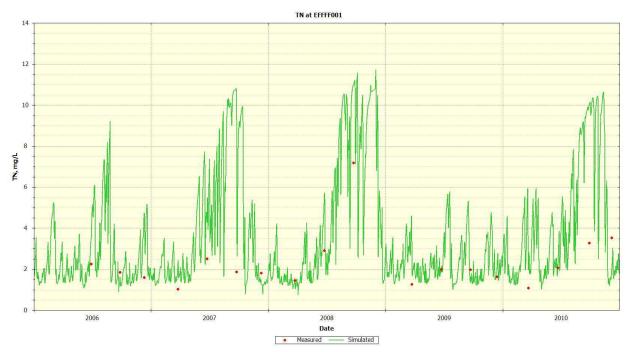


Figure A-358 Modeled vs. Observed TN (mg/L) at EFFFF001

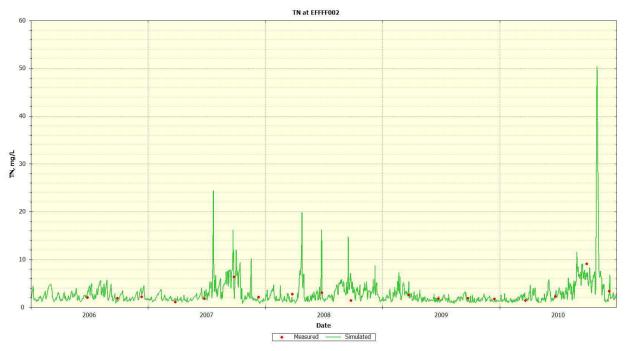


Figure A-359 Modeled vs. Observed TN (mg/L) at EFFFF002

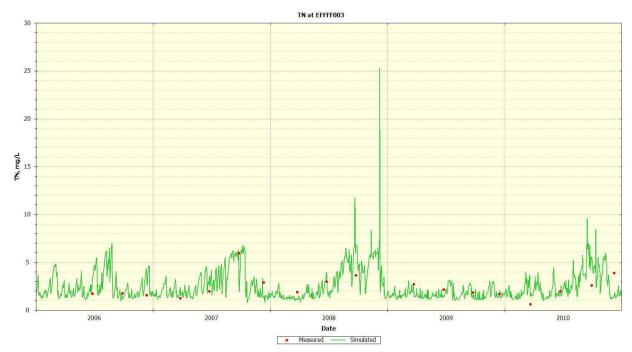


Figure A-360 Modeled vs. Observed TN (mg/L) at EFFFF003

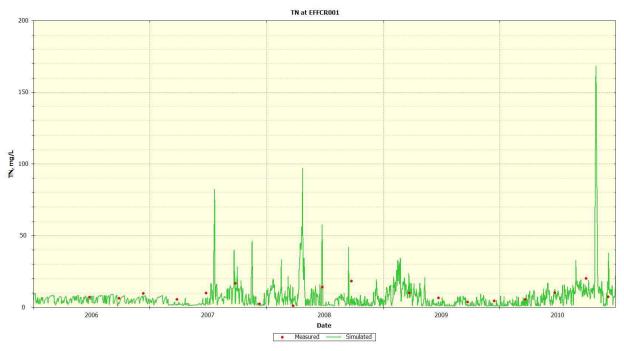


Figure A-361 Modeled vs. Observed TN (mg/L) at EFFCR001

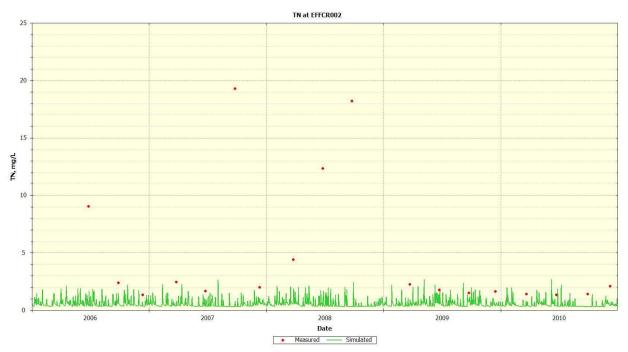


Figure A-362 Modeled vs. Observed TN (mg/L) at EFFCR002

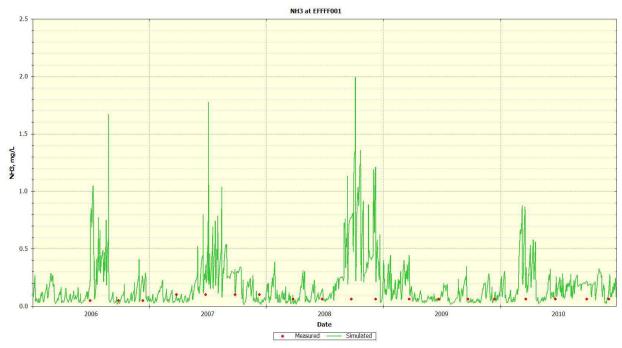


Figure A-363 Modeled vs. Observed NH<sub>3</sub> (mg/L) at EFFFF001

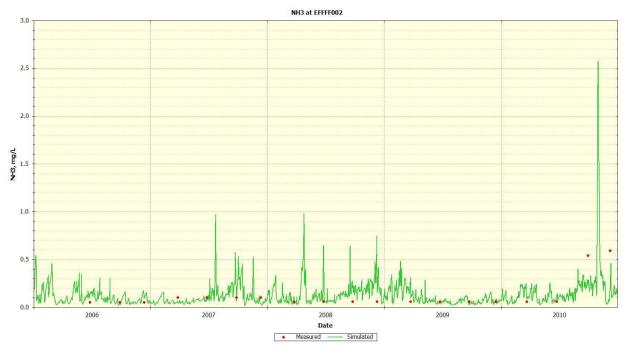


Figure A-364 Modeled vs. Observed NH<sub>3</sub> (mg/L) at EFFFF002

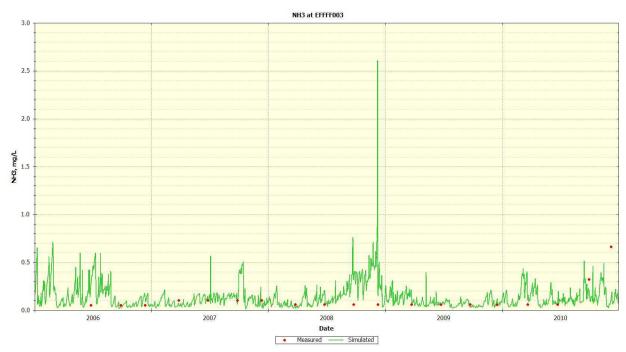


Figure A-365 Modeled vs. Observed NH<sub>3</sub> (mg/L) at EFFFF003

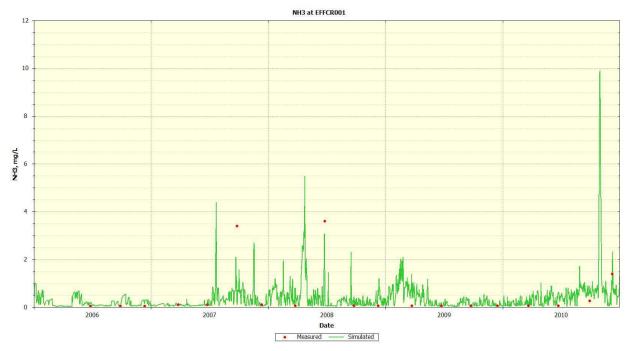


Figure A-366 Modeled vs. Observed NH<sub>3</sub> (mg/L) at EFFCR001

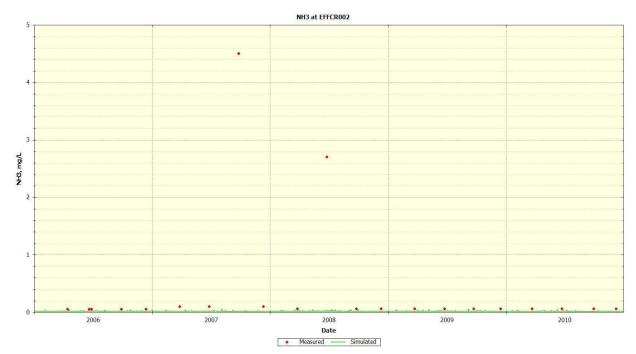


Figure A-367 Modeled vs. Observed NH<sub>3</sub> (mg/L) at EFFCR002

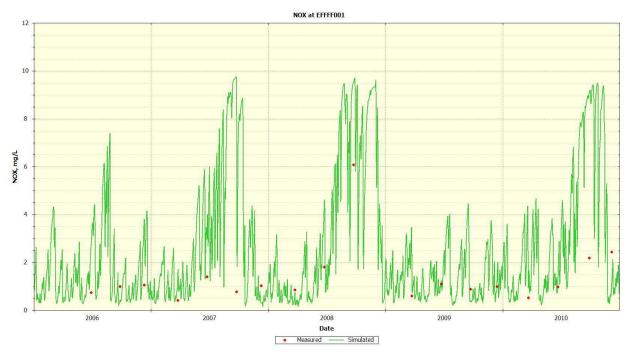


Figure A-368 Modeled vs. Observed  $NO_X$  (mg/L) at EFFFF001

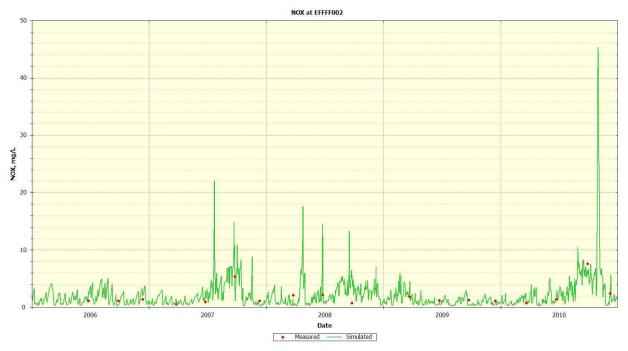


Figure A-369 Modeled vs. Observed NO<sub>X</sub> (mg/L) at EFFFF002

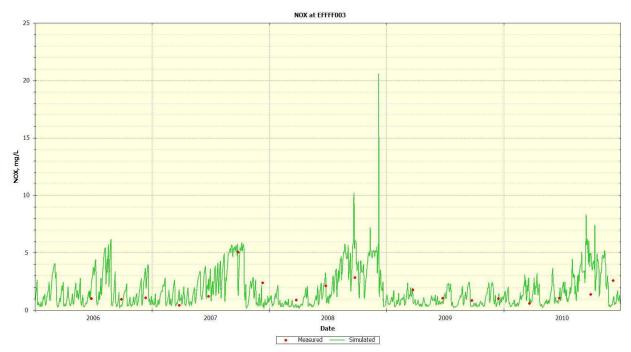


Figure A-370 Modeled vs. Observed NO<sub>X</sub> (mg/L) at EFFFF003

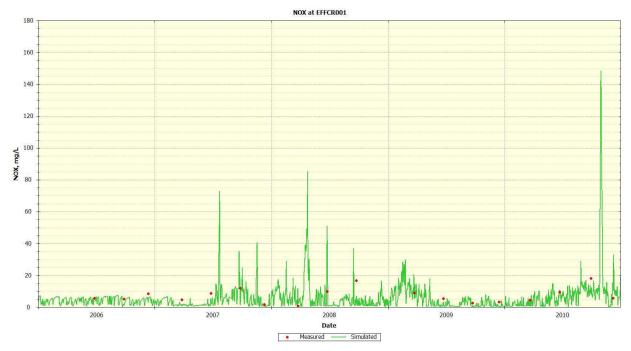


Figure A-371 Modeled vs. Observed NO<sub>X</sub> (mg/L) at EFFCR001

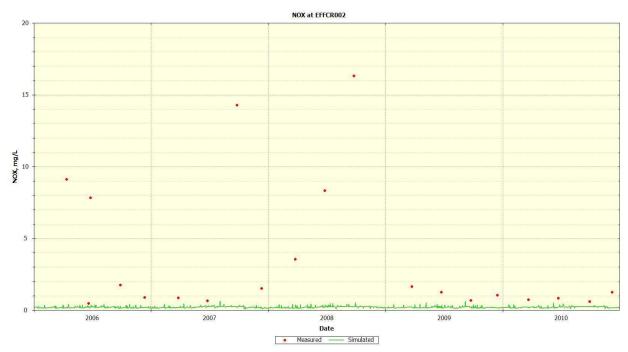


Figure A-372 Modeled vs. Observed  $NO_X$  (mg/L) at EFFCR002

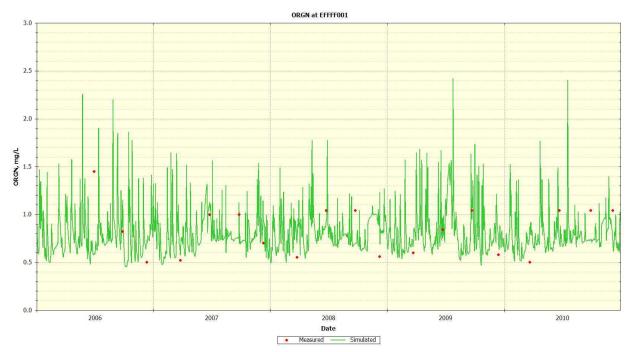


Figure A-373 Modeled vs. Observed ORGN (mg/L) at EFFFF001

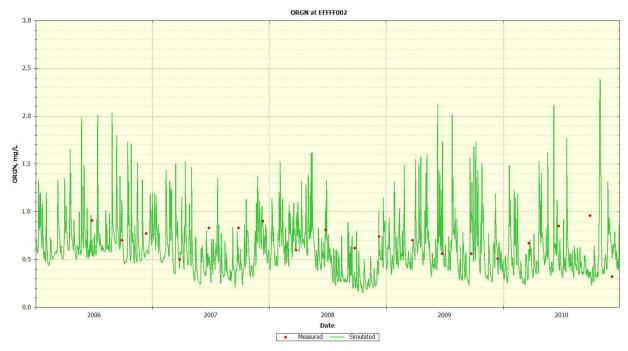


Figure A-374 Modeled vs. Observed ORGN (mg/L) at EFFFF002

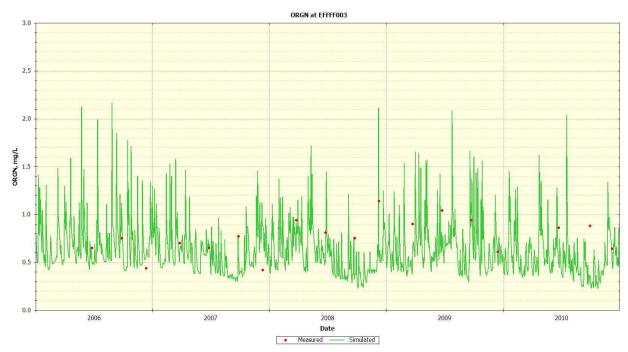


Figure A-375 Modeled vs. Observed ORGN (mg/L) at EFFFF003

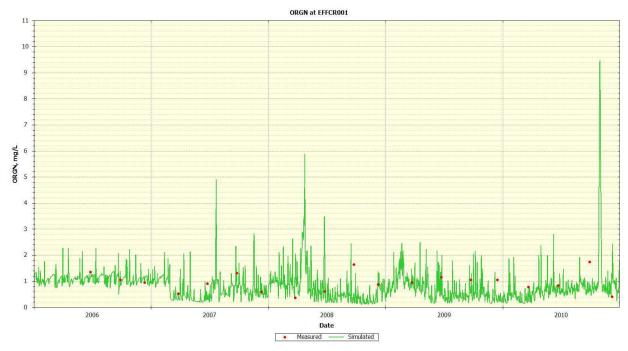


Figure A-376 Modeled vs. Observed ORGN (mg/L) at EFFCR001

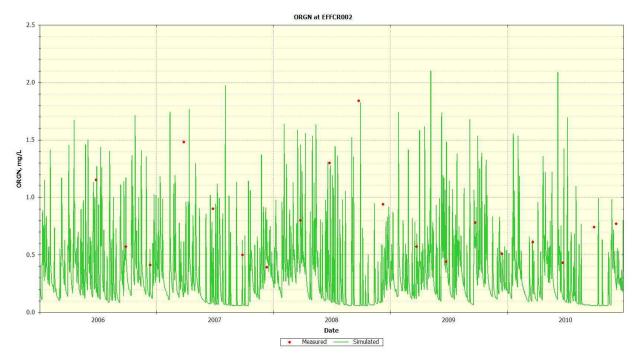


Figure A-377 Modeled vs. Observed ORGN (mg/L) at EFFCR002

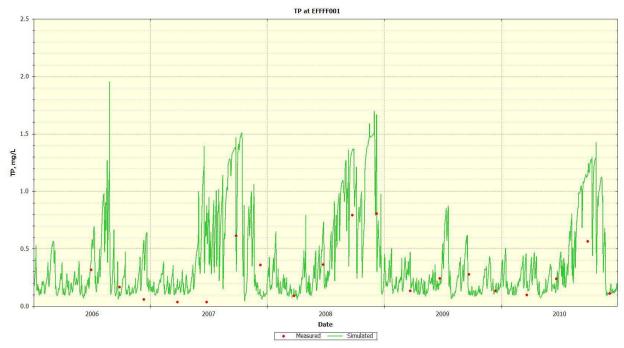


Figure A-378 Modeled vs. Observed TP (mg/L) at EFFFF001

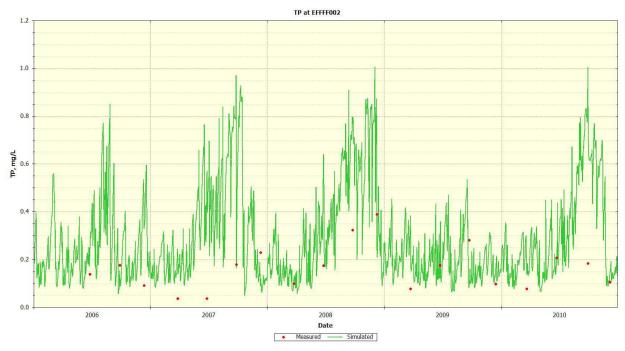


Figure A-379 Modeled vs. Observed TP (mg/L) at EFFFF002

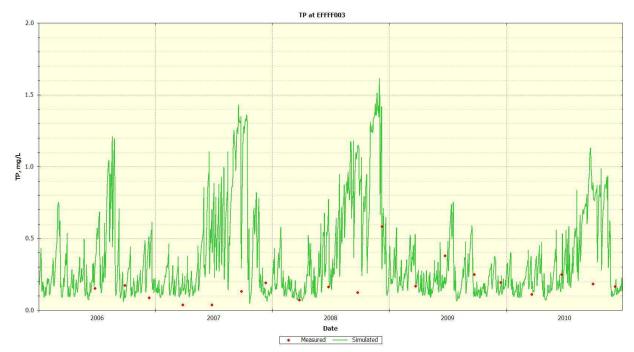


Figure A-380 Modeled vs. Observed TP (mg/L) at EFFFF003

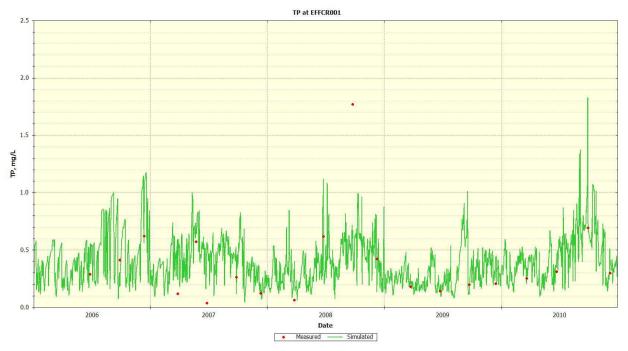


Figure A-381 Modeled vs. Observed TP (mg/L) at EFFCR001

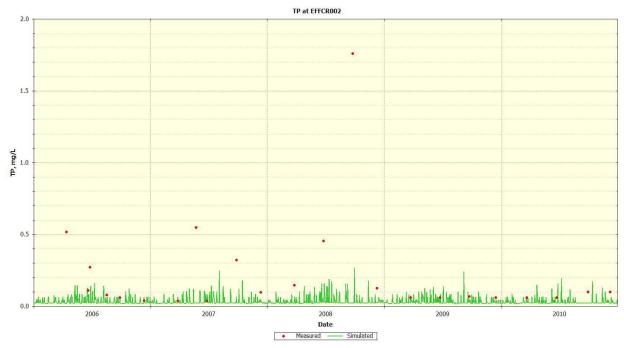


Figure A-382 Modeled vs. Observed TP (mg/L) at EFFCR002

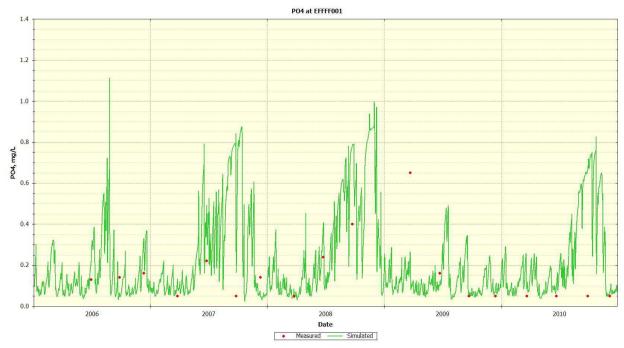


Figure A-383 Modeled vs. Observed PO<sub>4</sub> (mg/L) at EFFFF001

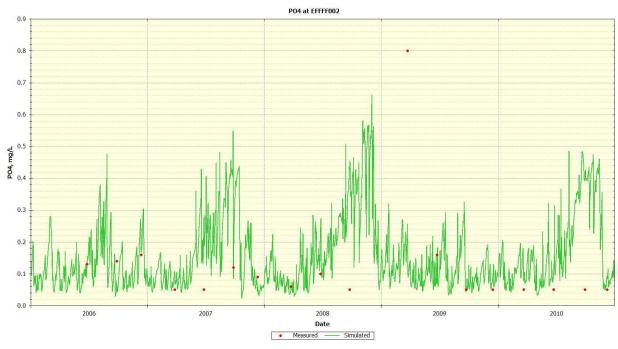


Figure A-384 Modeled vs. Observed PO<sub>4</sub> (mg/L) at EFFFF002

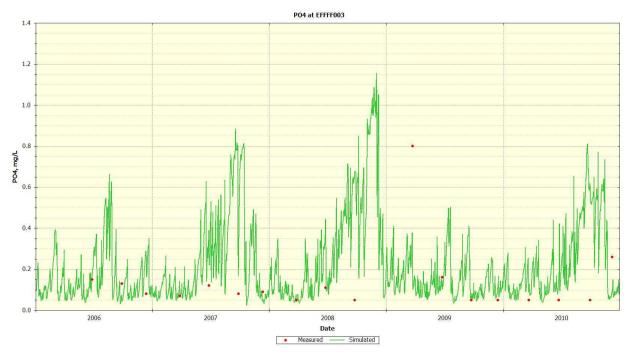


Figure A-385 Modeled vs. Observed PO<sub>4</sub> (mg/L) at EFFFF003

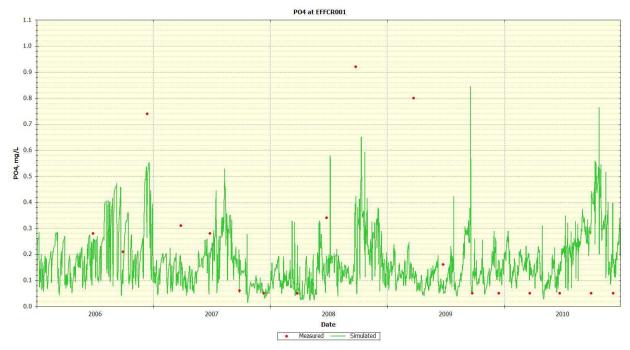


Figure A-386 Modeled vs. Observed PO<sub>4</sub> (mg/L) at EFFCR001

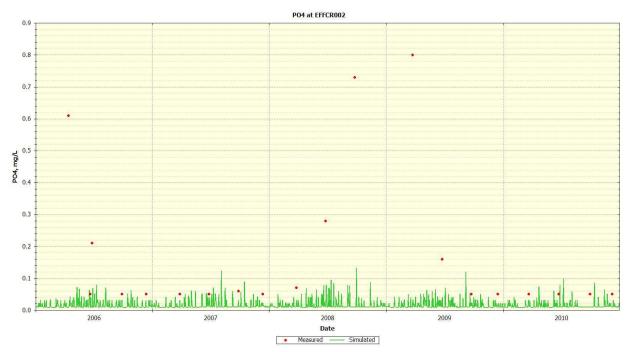


Figure A-387 Modeled vs. Observed PO<sub>4</sub> (mg/L) at EFFCR002

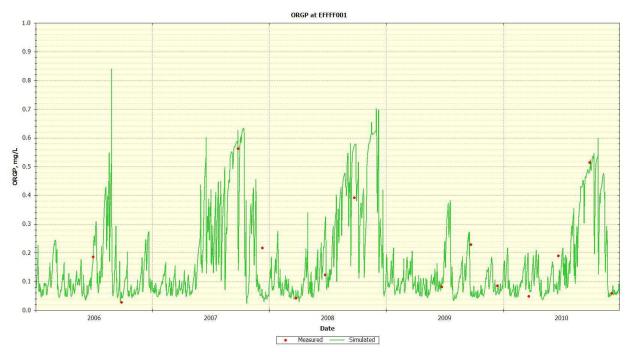


Figure A-388 Modeled vs. Observed ORGP (mg/L) at EFFFF001

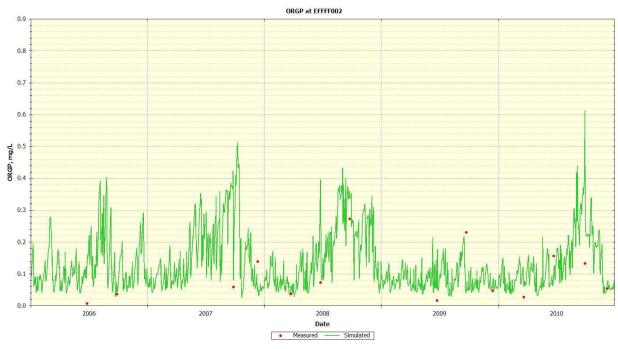


Figure A-389 Modeled vs. Observed ORGP (mg/L) at EFFFF002

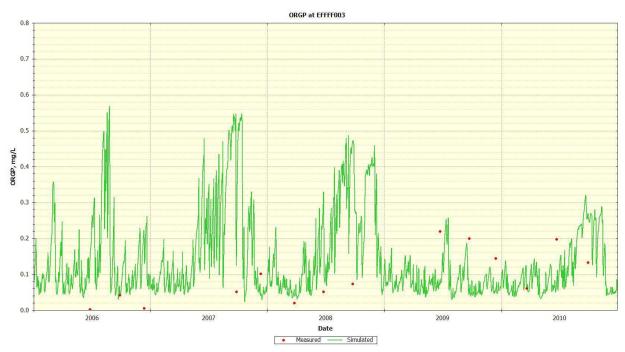


Figure A-390 Modeled vs. Observed ORGP (mg/L) at EFFFF003

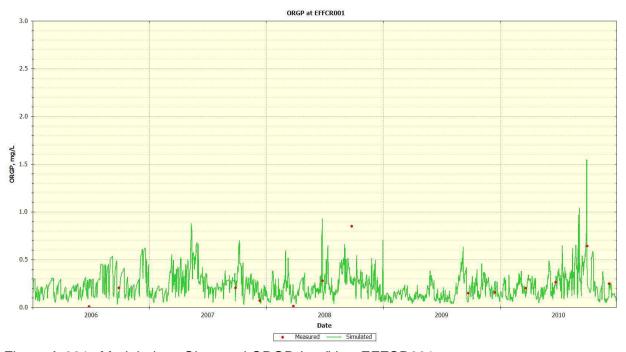


Figure A-391 Modeled vs. Observed ORGP (mg/L) at EFFCR001

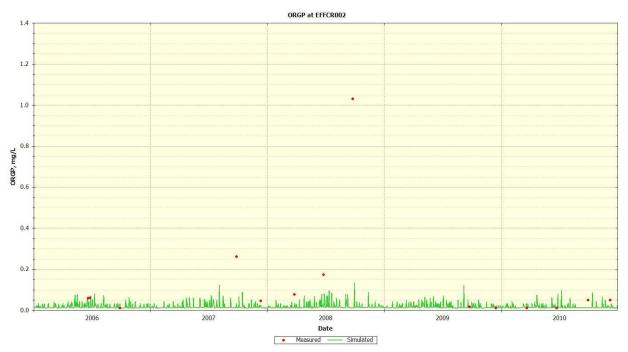


Figure A-392 Modeled vs. Observed ORGP (mg/L) at EFFCR002

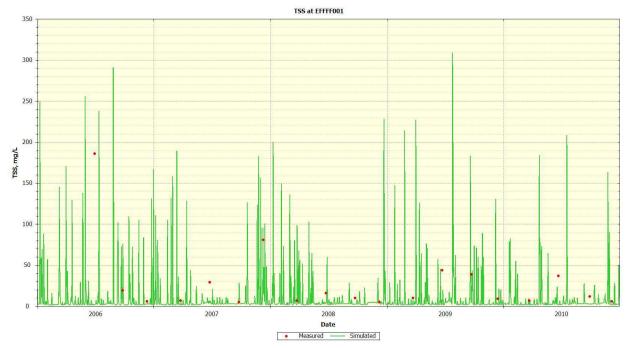


Figure A-393 Modeled vs. Observed TSS (mg/L) at EFFFF001

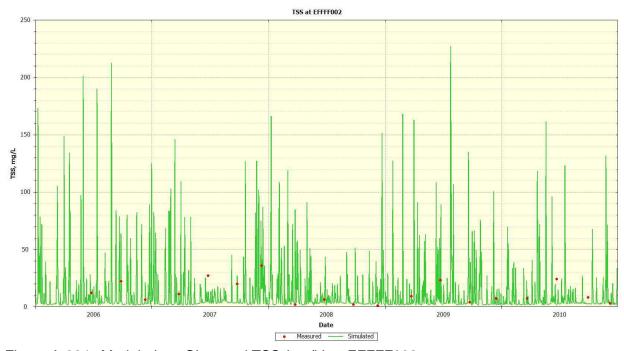


Figure A-394 Modeled vs. Observed TSS (mg/L) at EFFFF002

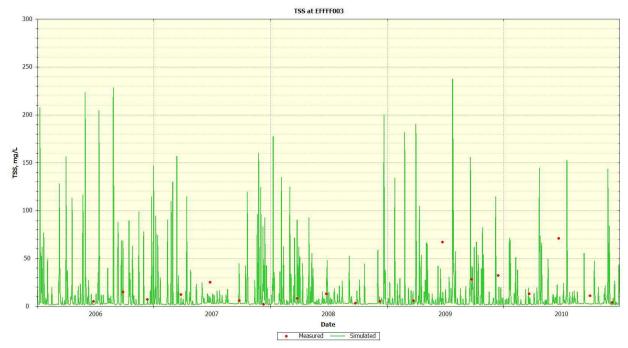


Figure A-395 Modeled vs. Observed TSS (mg/L) at EFFFF003

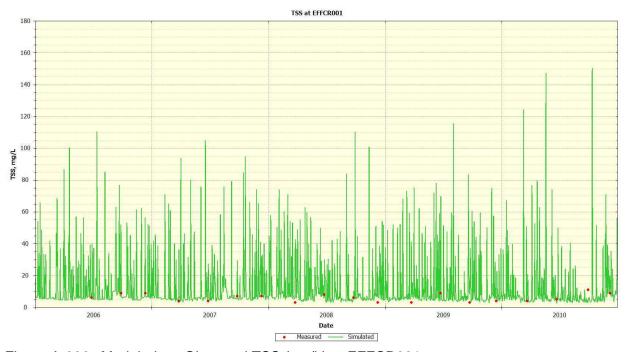


Figure A-396 Modeled vs. Observed TSS (mg/L) at EFFCR001

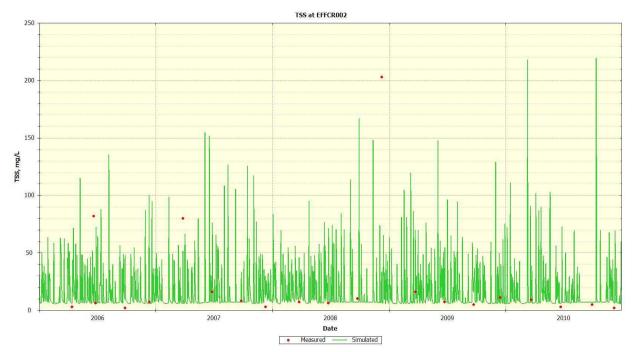


Figure A-397 Modeled vs. Observed TSS (mg/L) at EFFCR002

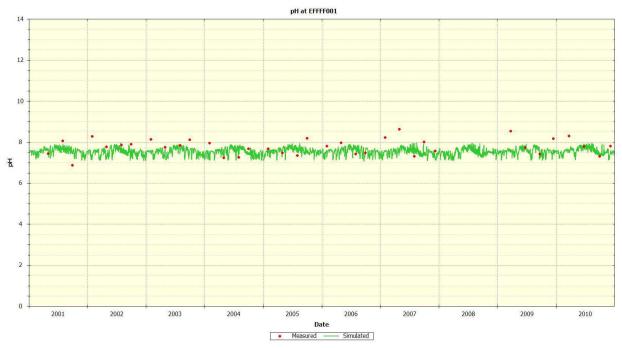


Figure A-398 Modeled vs. Observed pH at EFFFF001



Figure A-399 Modeled vs. Observed pH at EFFFF002

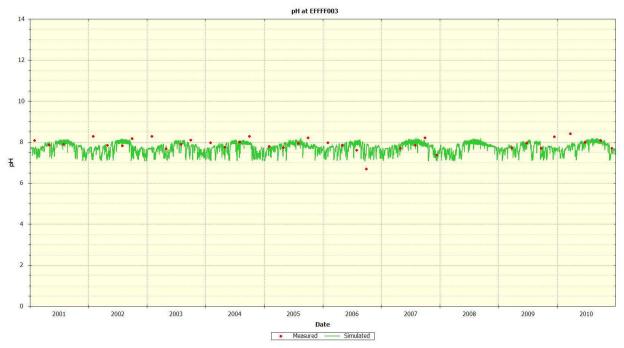


Figure A-400 Modeled vs. Observed pH at EFFFF003

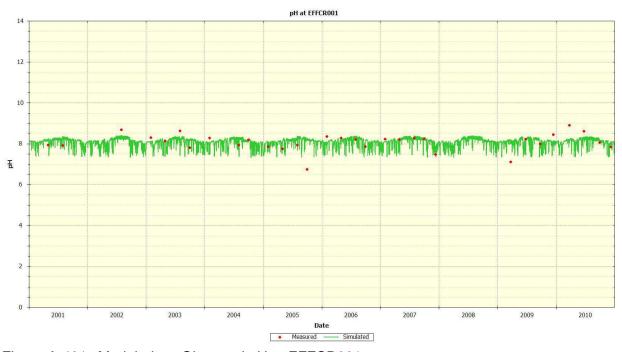


Figure A-401 Modeled vs. Observed pH at EFFCR001

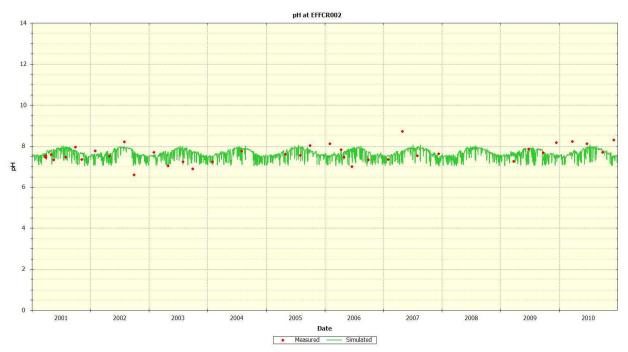


Figure A-402 Modeled vs. Observed pH at EFFCR002

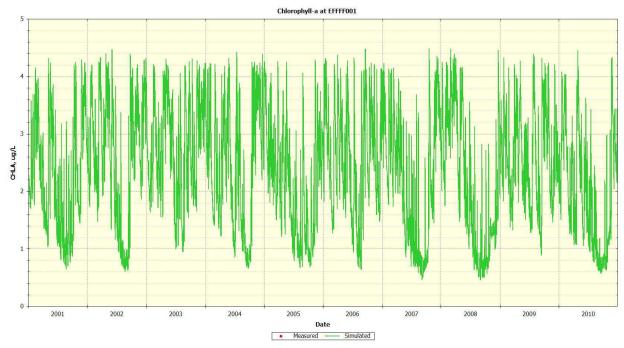


Figure A-403 Modeled Chlorophyll-a (µg/L) at EFFFF001

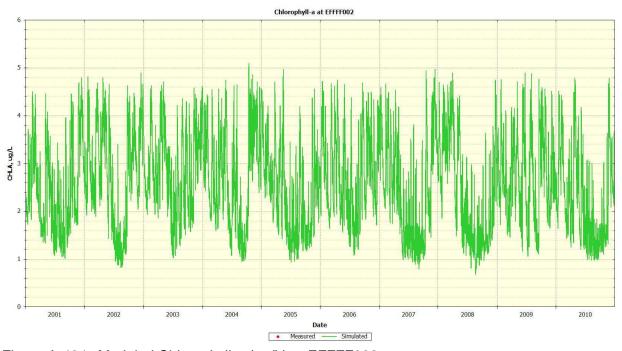


Figure A-404 Modeled Chlorophyll-a (µg/L) at EFFFF002

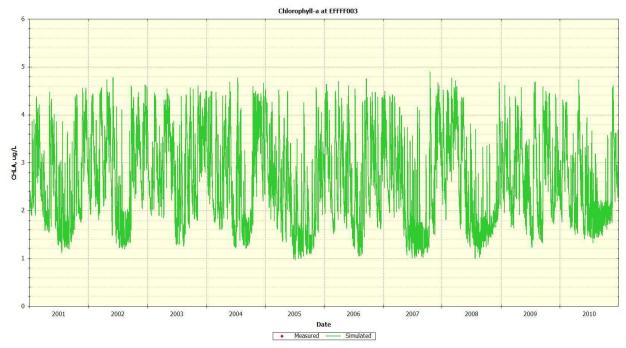


Figure A-405 Modeled Chlorophyll-a (µg/L) at EFFFF003

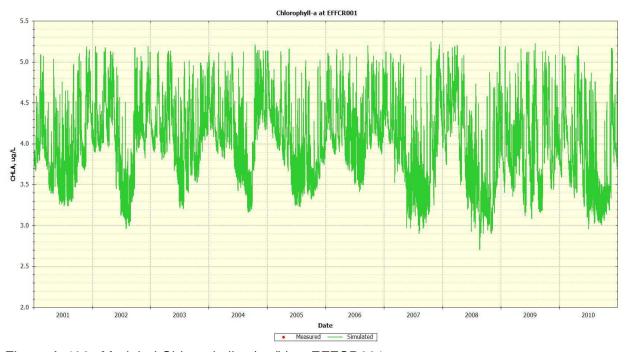


Figure A-406 Modeled Chlorophyll-a (µg/L) at EFFCR001

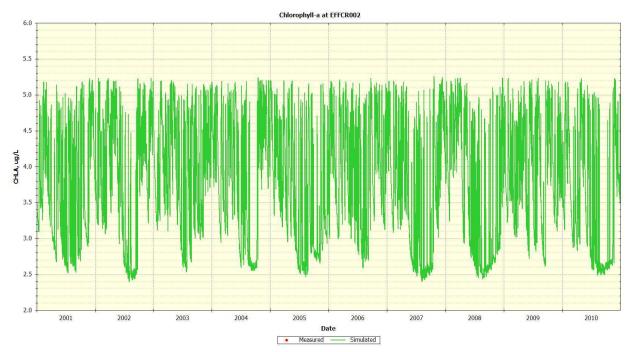


Figure A-407 Modeled Chlorophyll-a (µg/L) at EFFCR002

Table A-6 Summary Qualitative and Quantitative scores for the MSD Water Quality Validation Stations

| Location: Main Stem, Floyds Fork |  |           |           |                    |    |  |  |  |  |
|----------------------------------|--|-----------|-----------|--------------------|----|--|--|--|--|
| Station                          | Station Name                               | Qualitati | ive score | Quantitative score |    |  |  |  |  |
|                                  |  | TN        | TP        | TN                 | TP |  |  |  |  |
| EFFFF001                         | Floyds Fork at Ash Avenue                  | VG        | G         | 11                 | 48 |  |  |  |  |
| EFFFF002                         | Floyds Fork at Bardstown Road              | G         | G         | 42                 | 48 |  |  |  |  |
| EFFFF003                         | Floyds Fork at Old Taylorsville Road       | G         | VG        | 37                 | 27 |  |  |  |  |
| Location: Tributaries            |  |           |           |                    |    |  |  |  |  |
| EFFCR001                         | Chenoweth Run # 1 at Gelhaus Lane          | G         | G         | 47                 | 31 |  |  |  |  |
| EFFCR002                         | Chenoweth Run # 1 at Ruckriegal<br>Parkway | F         | F         | 82                 | 77 |  |  |  |  |

Table A-7 Calibration Statistics for TN for MSD Water Quality Validation Stations utilized in the Floyds Fork model

| USGS Station                      | Station Name                               | Simulated |         |          | Measured |         |          | Difference |         |          |
|-----------------------------------|--|-----------|---------|----------|----------|---------|----------|------------|---------|----------|
|                                   |  | Mean      | 5 %tile | 95 %tile | Mean     | 5 %tile | 95 %tile | Mean       | 5 %tile | 95 %tile |
| Location : Main Stem, Floyds Fork |  |           |         |          |          |         |          |            |         |          |
| EFFFF001                          | Floyds Fork at Ash Avenue                  | 2.289     | 0.000   | 0.000    | 3.925    | 0.000   | 0.000    | 1.636      | 0.000   | 0.000    |
| EFFFF002                          | Floyds Fork at Bardstown Road              | 2.706     | 0.000   | 0.000    | 3.584    | 0.000   | 0.000    | 0.878      | 0.000   | 0.000    |
| EFFFF003                          | Floyds Fork at Old Taylorsville Road       | 2.387     | 0.000   | 0.000    | 2.608    | 0.000   | 0.000    | 0.221      | 0.000   | 0.000    |
| Location: Tributaries             |  |           |         |          |          |         |          |            |         |          |
| EFFCR001                          | Chenoweth Run # 1 at Gelhaus Lane          | 8.773     | 0.000   | 0.000    | 8.847    | 0.000   | 0.000    | 0.074      | 0.000   | 0.000    |
| EFFCR002                          | Chenoweth Run # 1 at Ruckriegal<br>Parkway | 4.801     | 1.330   | 19.280   | 0.517    | 0.304   | 1.018    | -4.283     | 1.026   | 18.262   |

Table A-8 Calibration Statistics for TP for MSD Water Quality Validation Stations utilized in the Floyds Fork model

| USGS Station                      | Station Name                               | Simulated |         |          | Measured |         |          | Difference |         |          |
|-----------------------------------|--|-----------|---------|----------|----------|---------|----------|------------|---------|----------|
|                                   |  | Mean      | 5 %tile | 95 %tile | Mean     | 5 %tile | 95 %tile | Mean       | 5 %tile | 95 %tile |
| Location : Main Stem, Floyds Fork |  |           |         |          |          |         |          |            |         |          |
| EFFFF001                          | Floyds Fork at Ash Avenue                  | 0.280     | 0.036   | 0.804    | 0.489    | 0.090   | 1.568    | 0.209      | -0.054  | -0.763   |
| EFFFF002                          | Floyds Fork at Bardstown Road              | 0.162     | 0.036   | 0.386    | 0.327    | 0.086   | 0.956    | 0.165      | -0.050  | -0.571   |
| EFFFF003                          | Floyds Fork at Old Taylorsville Road       | 0.180     | 0.036   | 0.571    | 0.347    | 0.087   | 1.125    | 0.166      | -0.051  | -0.554   |
| Location: Tributaries             |  |           |         |          |          |         |          |            |         |          |
| EFFCR001                          | Chenoweth Run # 1 at Gelhaus Lane          | 0.380     | 0.038   | 1.662    | 0.439    | 0.123   | 1.527    | 0.059      | -0.084  | 0.135    |
| EFFCR002                          | Chenoweth Run # 1 at Ruckriegal<br>Parkway | 0.218     | 0.036   | 1.215    | 0.029    | 0.019   | 0.054    | -0.189     | 0.017   | 1.161    |

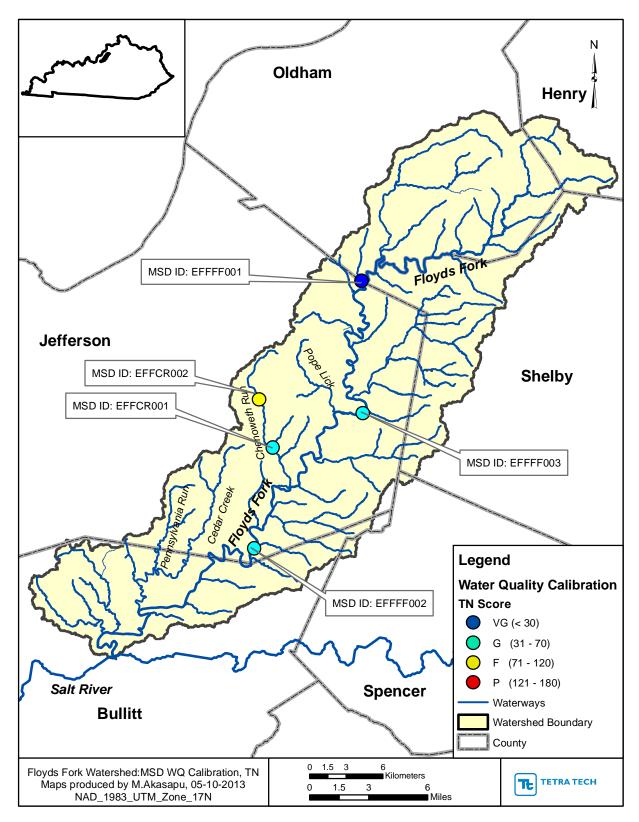


Figure A-408 MSD Water Quality for TN in the Floyds Fork Watershed

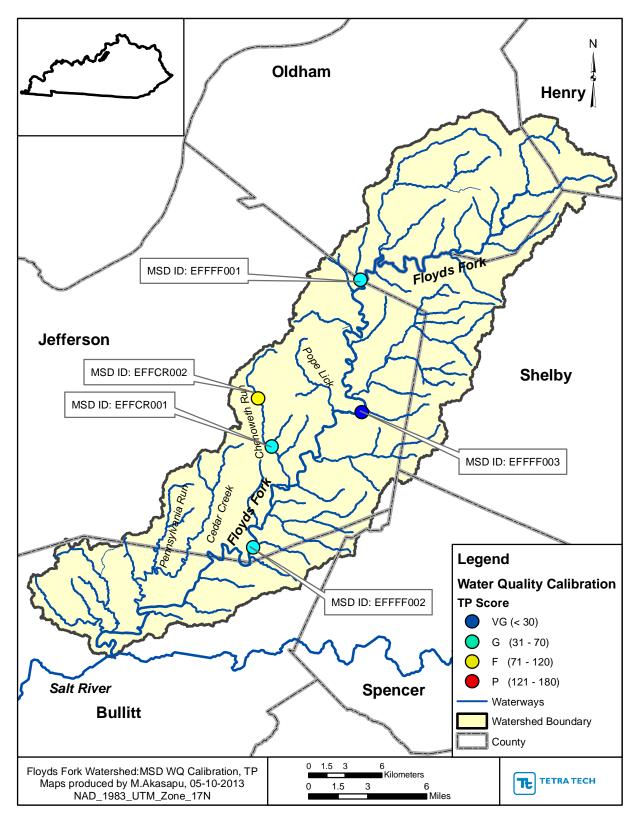


Figure A-409 MSD Water Quality for TP in the Floyds Fork Watershed